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[*Whole Number 365.*

REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDING JUNE 30, 1905.

VOLUME 1.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1907.

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THE UNITED STATES

BUREAU OF EDUCATION,

Created as a Department March 2, 1867.

Made an Office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D.,
July 1, 1906, to date.

EDUCATION DEPT.

UNIV. OF CALIFORNIA

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UNIV. OF
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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., December 5, 1906.

SIR: I have the honor to submit herewith the Annual Report of this Office for the year ending June 30, 1905.

The statistical tables and chapters of general educational information contained in this report were prepared under the direction of my distinguished predecessor, the Honorable William T. Harris, LL.D. It has seemed best to present the material which he had brought together for this report with the least possible alteration. The appropriation, however, which was made near the close of his term of service, for the printing and binding of this report—namely, the sum of $20,000 (34 Stat. L., p. 760)—is less, by more than one-third, than the amount which has been expended for this purpose each year for the past eight years. It has accordingly been necessary to reduce by one-half the number of pages in the report as originally planned by Commissioner Harris. The statistical tables are presented in full, the necessary reduction having been made by the omission of certain chapters of general educational information.

STATISTICS OF STATE SCHOOL SYSTEMS.

The enrollment in the institutions commonly grouped together as constituting the main body of our educational system—that is, in schools and colleges, public and private—during the year 1904–5 was 18,160,475, an increase of 263,585 pupils as compared with the previous year. Of this number there were enrolled in public institutions supported by taxation and funds belonging to States and municipalities 16,596,503 as compared with 16,379,443, reported for the previous year. Adding to this number the enrollment of various special schools, public and private, amounting to 727,371, we have a

grand total of 18,887,846. The several items entering into this grand total are presented in the following table:

Enrollment in schools and colleges and in special schools in the United States, 1904–5.

Grade.	Number of pupils.		
	Public.	Private.	Total.
Elementary (primary and grammar)	15,788,598	1,230,661	17,019,259
Secondary (high schools and academies)	695,989	180,061	876,050
Universities and colleges	46,824	91,720	138,544
Professional schools	10,571	50,751	61,322
Normal schools	54,521	10,779	65,300
Total, schools and colleges	16,596,503	1,563,972	18,160,475
City evening schools	292,319		292,319
Business schools		146,086	146,086
Reform schools	36,580		36,580
Schools for the deaf	11,414	538	11,952
Schools for the blind	4,441		4,441
Schools for the feeble-minded	15,530	710	16,240
Government Indian schools	30,106		30,106
Indian schools (Five Civilized Tribes)	12,432		12,432
Schools in Alaska supported by the Government	3,083		3,083
Schools in Alaska supported by incorporated municipalities (estimated)	3,200		3,200
Orphan asylums and other benevolent institutions (estimated)		15,000	15,000
Private kindergartens (estimated)		105,932	105,932
Miscellaneous (including schools of music, oratory, elocution, cookery, and various special arts) (estimated)		50,000	50,000
Total, special schools	409,105	318,266	727,371
Grand total	17,005,608	1,882,238	18,887,846

The following table gives a summary of the total expenditures for education in the United States for the year 1904–5, in comparison with the total of public expenditure for all purposes:

Federal, State, and local expenditures for all purposes and expenditures for schools and other institutions of learning in the United States, 1904–5.

Total disbursements by the United States Government	$720,105,498
Estimated expenditure by the States	125,000,000
Estimated expenditure by minor civil divisions	600,000,000
Total public expenditure	1,445,105,498
State expenditure for common schools (elementary and secondary)	291,616,660
Expenditure for private elementary and secondary schools (partly estimated)	21,258,228
Expenditure for universities and colleges	41,775,101
Expenditure for professional schools (partly estimated)	2,900,000
Expenditure for normal schools	6,277,510
Expenditure for commercial schools (estimated)	3,000,000
Expenditure for schools for the defective classes	5,818,656
Expenditure for reform schools	4,350,317
Total expenditure for education	376,996,472

It will be seen that there was expended for education a sum equal to more than one-half of the cost of the National Government; and that of the total expenditure for public purposes of all the States, counties, cities, towns, etc., two-fifths (40.2 per cent) was expended

for the support of common schools. The aggregate of school property increased in value during the year $48,345,462, reaching a total of $733,446,805. The average expenditure for school purposes advanced to 16.8 cents per day for the instruction of each pupil, as compared with 16½ cents per day the previous year.

The significance of the figures of school enrollment, attendance, etc., is seen in the comparison of these figures for successive years and over considerable periods of time. It may be assumed, in these as in other particulars, that our educational systems have not yet reached that degree of efficiency which is to be expected and desired, and that the advance noted from year to year is a progress toward some goal. While such a goal can not be fixed with any degree of finality, and may be expected to advance from time to time as the actual conditions approach thereto, we can, at least in a provisional way, indicate a goal toward which American education is advancing, and which may conceivably be reached within a generation or two. The actual attainments of some of the more favored of our communities are suggestive at this point. Broadly speaking, then, we may regard the current movement in American education as tending toward a condition in which the enrollment in schools of all kinds will be equal to the total population between the ages of 5 and 18; that the attendance of the pupils so enrolled will be practically constant, excepting for the contingencies of sickness, fire and flood, and the like, and will accordingly approximate 95 per cent of the total enrollment; that the school year for all pupils so enrolled, at least in schools of elementary and secondary grade, will consist of two hundred days, including in that number six or eight holidays; and that the attendance of every pupil shall extend over the whole school year. These items of school attendance, to be sure, indicate only the beginning of things so far as education is concerned, the vital question being what is done educationally for the children when they are brought into the schools. But school attendance and the length of the school year are fundamental facts in our education, for the schools at their best can do little or nothing for those who do not go to school, and the mere habit of school attendance itself has some educational value. The following tables show the trend of the statistics of recent years with reference to these several items of school attendance, and give additional information with reference to the progress and present condition of our school systems:

TABLE I.—*Common school statistics of the United States.*

	1869–70.	1879–80.	1889–90.	1899–1900.	1900–1901.	1901–2.	1902–3.[a]	1903–4.[a]	1904–5.[a]
I.—*General statistics.*									
Total population	[b] 38,558,371	[b] 50,155,783	[b] 62,622,250	[b] 75,602,515	[c] 77,274,967	[c] 78,576,436	[c] 79,900,389	[c] 81,241,246	[c] 82,584,061
Persons 5 to 18 years of age	[b] 12,055,443	[b] 15,065,767	[b] 18,543,201	[b] 21,404,322	[c] 21,908,636	[c] 22,278,693	[c] 22,655,001	[c] 23,028,748	[c] 23,410,800
Pupils enrolled (duplicates excluded)	6,871,522	9,867,505	12,722,581	15,503,110	15,702,517	15,917,385	16,009,361	16,256,038	16,468,300
Per cent of total population enrolled	17.82	19.67	20.32	20.51	20.32	20.26	20.04	20.01	19.94
Per cent of persons 5 to 18 years of age enrolled	57.00	65.50	68.61	72.43	71.67	71.45	70.67	70.59	70.35
Average daily attendance	4,077,347	6,144,143	8,153,635	10,632,772	10,716,094	11,064,164	11,054,502	11,318,256	11,481,531
Relation of same to enrollment (per cent)	59.3	62.3	64.1	68.6	68.2	69.5	69.2	69.6	69.7
Average length of school term (days)	132.2	130.3	134.7	144.3	143.7	144.7	147.2	146.7	150.9
Total number of days attended by all pupils	539,053,423	800,719,970	1,008,232,725	1,534,822,633	1,539,576,527	1,601,169,762	1,627,405,037	1,660,507,716	1,732,845,228
Average number of days attended by each person 5 to 18	44.7	53.1	59.2	71.8	70.3	71.9	71.8	72.1	74.0
Average number attended by each pupil enrolled	78.4	81.1	86.3	99.0	98.0	100.6	101.7	102.1	105.2
Male teachers	77,529	122,795	125,525	126,588	125,838	120,883	117,035	113,744	110,532
Female teachers	122,986	163,798	238,397	296,474	306,080	320,936	332,252	341,498	349,737
Whole number of teachers	200,515	286,593	363,922	423,062	431,918	441,819	449,287	455,242	460,269
Per cent of male teachers	38.7	42.8	34.5	29.9	29.1	27.4	26.0	25.0	24.0
Average monthly wages of male teachers [d]				$46.53	$47.55	$49.05	$49.98	$50.96	$55.04
Average monthly wages of female teachers [d]				$38.93	$39.17	$39.77	$40.51	$41.54	$42.69
Number of schoolhouses [e]	116,312	178,222	224,526	248,279	251,487	254,655	256,789	257,627	256,826
Value of all school property	$130,383,008	$209,571,718	$342,531,791	$550,069,217	$572,125,215	$599,449,384	$643,903,228	$685,101,343	$733,446,805
II.—*Financial statistics.*									
Receipts:									
From income of permanent funds and rents			$7,744,765	$9,152,274	$9,767,110	$10,022,843	$12,102,581	$10,193,093	$13,194,042
From State taxes			$26,345,323	$37,886,740	$36,281,256	$39,215,910	$40,455,815	$42,552,969	$44,349,295
From local taxes			$97,222,426	$149,486,845	$163,897,478	$173,151,453	$173,730,858	$193,215,794	$210,167,770
From all other sources			$11,882,292	$23,240,130	$25,393,493	$23,107,392	$25,347,865	$33,172,139	$34,107,962
Total received			$143,194,806	$219,765,989	$235,339,337	$245,497,598	$251,637,119	$279,133,995	$301,819,069
Per cent of total derived from—									
Income of permanent funds and rents			5.4	4.2	4.2	4.1	4.8	3.7	4.4
State taxes			18.4	17.2	15.4	16.0	16.1	15.2	14.7
Local taxes			67.9	68.0	69.6	70.5	69.0	69.2	69.6
All other sources			8.3	10.6	10.8	9.4	10.1	11.9	11.3

Expenditures:									
For sites, buildings, furniture, libraries, and apparatus			$26,207,041	$35,450,820	$39,872,278	$39,962,863	$46,289,074	$49,453,269	$56,416,168
For salaries of superintendents and teachers	$37,822,566	$55,942,972	$91,836,484	$137,687,746	$143,378,507	$151,443,681	$157,110,108	$167,824,753	$177,462,981
For all other purposes			$22,463,190	$41,826,052	$44,272,042	$46,855,765	$48,058,443	$56,938,205	$57,737,511
Total expended	$63,396,666	$78,094,657	$140,506,715	$214,964,618	$227,522,827	$238,262,299	$251,457,625	$273,216,227	$291,616,660
Expenditure per capita of population	$1.64	$1.56	$2.24	$2.84	$2.94	$3.03	$3.15	$3.36	$3.53
Expenditure per pupil (of average attendance):									
For sites, buildings, etc			$3.21	$3.33	$3.72	$3.61	$4.19	$4.37	$4.91
For salaries	$9.28	$9.10	$11.26	$12.95	$13.38	$13.69	$14.21	$14.83	$15.46
For all other purposes			$2.76	$3.93	$4.13	$4.23	$4.35	$4.94	$5.03
Total expenditure per pupil	$15.55	$12.71	$17.23	$20.21	$21.23	$21.53	$22.75	$24.14	$25.40
Per cent of expenditure devoted to—									
Sites, buildings, etc			18.6	16.5	17.5	16.8	18.4	18.1	19.3
Salaries	59.7	71.6	65.4	64.0	63.0	63.5	62.5	61.4	60.9
All other purposes			16.0	19.5	19.5	19.7	19.1	20.5	19.8
Average expenditure per day for each pupil (cents):									
For salaries	7.0	7.0	8.4	9.0	9.3	9.5	9.7	10.1	10.2
For all purposes	11.8	9.7	12.8	14.0	14.8	14.9	15.5	16.5	16.8

[a] The figures for this year are subject to correction.
[b] United States census.
[c] Estimated.
[d] Several States are not included in this average.
[e] Including buildings rented.

TABLE II.—*Number of pupils and students of all grades in both public and private schools and colleges, 1904–5.*

NOTE.—The classification of States made use of in the following table is the same as that adopted by the United States census, and is as follows: *North Atlantic Division:* Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania. *South Atlantic Division:* Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida. *South Central Division:* Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Arkansas, Oklahoma, and Indian Territory. *North Central Division:* Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. *Western Division:* Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon, and California.

Division.	Pupils receiving elementary instruction (primary and grammar grades).		Pupils receiving secondary instruction (high school grades).[a]		Students receiving higher instruction.										
					In universities and colleges.[c]			In schools of medicine, law, and theology.[e]			In normal schools.[g]			Total higher.	
	Public.	Private (largely estimated).	Public.[b]	Private (in preparatory schools, academies, seminaries, etc.).	Public.[d]	Private.	Total.	Public.[f]	Private.	Total.	Public.	Private.	Total.	Public.	Private.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
The United States..	15,788,598	1.230,661	695,989	180,061	46,824	91,720	138,544	10,571	50,751	61,322	54,521	10,779	[h]65,300	111,916	153,250
North Atlantic Division..	3,682,769	432,810	226,834	52,702	5,303	38,014	43,317	383	18,168	18,551	19,900	1,100	21,000	25,586	57,282
South Atlantic Division..	2,286,836	103,481	38,140	25,403	6,761	12,055	18,816	1,447	6,873	8,320	5,291	1,405	6,696	13,499	20,333
South Central Division...	3,270,382	158,376	53,545	30,897	4,490	10,243	14,733	1,367	6,537	7,904	5,612	2,520	8,132	11,469	19,300
North Central Division...	5,604,692	478,998	323,979	58,262	23,288	26,772	50,060	6,557	17,606	24,163	19,391	5,717	25,108	49,236	50,095
Western Division.....	943,919	56,996	53,491	12,797	6,982	4,636	11.618	817	1,567	2,384	4,327	37	4,364	12,126	6,240

[a] Including pupils in preparatory or academic departments of higher institutions, public and private, and excluding elementary pupils, who are classed in columns 2 and 3. A classification of public and of private secondary students, according to the character of the institutions in which they are found, is given in Chap. 24.

[b] This is made up from the returns of individual high schools to the Bureau, and is somewhat too small, as there are many secondary pupils outside the completely organized high schools whom there are no means of enumerating.

[c] Including colleges for women, agricultural and mechanical (land-grant) colleges, and scientific schools. Students in law, theological, and medical departments are excluded, being tabulated in columns 9–11. Students in academic and preparatory departments are also excluded, being tabulated in columns 4 and 5.

[d] Mainly State universities and agricultural and mechanical colleges.

[e] Including also schools of dentistry, pharmacy, and veterinary medicine.

[f] Mainly in schools or departments of medicine and law attached to State universities.

[g] Nonprofessional pupils in normal schools are included in columns 4 and 5.

[h] There are, in addition to this number, 28,340 students taking normal courses in universities, colleges, and public and private high schools. (See Chap. 23.)

TABLE II.—*Number of pupils and students of all grades in both public and private schools and colleges, 1904–5*—Continued.

Division.	Summary of pupils by grade.			Summary according to control.		Grand total.	Per cent in each grade of the whole number of pupils.			Per cent of public pupils.			Per cent of the total population enrolled in each grade.			
	Elementary.	Secondary.	Higher.	Public.	Private.		Elementary.	Secondary.	Higher.	Elementary.	Secondary.	Higher.	Elementary.	Secondary.	Higher.	Total.
1	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
The United States..	17,019,259	876,050	265,166	16,596,503	1,563,972	18,160,475	93.72	4.82	1.46	92.73	79.45	42.21	20.62	1.06	0.32	22.00
North Atlantic Division..	4,115,579	279,536	82,868	3,935,189	542,794	4,477,983	91.91	6.24	1.85	88.62	81.16	30.88	18.00	1.22	0.36	19.58
South Atlantic Division .	2,390,317	63,543	33,832	2,338,475	149,217	2,487,692	96.09	2.55	1.36	95.69	60.03	30.90	21.39	0.57	0.30	22.26
South Central Division...	3,428,758	84,442	30,769	3,335,396	208,573	3,543,969	96.75	2.38	0.87	95.15	63.41	37.27	22.02	0.54	0.20	22.76
North Central Division ..	6,083,690	382,241	99,331	5,977,907	587,355	6,565,262	92.67	5.82	1.51	92.13	84.76	49.57	21.46	1.35	0.35	23.16
Western Division	1,000,915	66,288	18,366	1,009,536	76,033	1,085,569	92.21	6.10	1.69	94.31	80.69	66.01	21.81	1.45	0.40	23.66

TABLE III*a*. *Increase in fifteen years of the total number of persons receiving education and of the total population.*

School year.	Pupils, public and private of all grades.	Increase over preceding year.	Per cent of increase.	Estimated population.	Increase over preceding year.	Per cent of increase.
1889-90	14,512,778			[a] 62,622,250		
1890-91	14,669,069	156,291	1.08	63,809,588	1,187,338	1.90
1891-92	14,714,933	45,864	.31	65,027,377	1,217,789	1.91
1892-93	15,083,630	368,697	2.51	66,260,491	1,233,114	1.91
1893-94	15,530,268	446,638	2.96	67,537,727	1,271,236	1.92
1894-95	15,688,622	158,354	1.02	68,844,341	1,306,614	1.93
1895-96	15,997,197	308,575	1.97	70,127,242	1,282,901	1.86
1896-97	16,255,093	257,896	1.61	71,445,273	1,318,031	1.88
1897-98	16,687,643	432,550	2.66	72,792,617	1,347,344	1.89
1898-99	16,738,362	50,719	.30	74,178,966	1,386,349	1.90
1899-1900	17,020,710	282,348	1.69	[a] 75,602,515	1,423,549	1.92
1900-1901 [b]	17,209,230	278,520	1.64	77 274 967	1,672,452	2.21
1901-2	17,460,000	160,770	.93	78,544,816	1,269,849	1.64
1902-3	17,539 478	79,478	.46	79,900,289	1,355,573	1 73
1903-4	17,896,890	357,412	2.04	81,241,346	1,340,857	1 68
1904-5	18,160,475	263,585	1.45	82,584,061	1,342,815	1.63
Total increase		3,647,697	25.13		19,961,811	31.86
Average		243,180	1.51		1,330,787	1.86

[a] United States census. [b] Indian Territory added.

TABLE III*b*.—*Per cent of the population receiving education of different grades.*

Grade.	1889-90.		1899-1900.		1904-5.	
	Pupils.	Per cent of population.	Pupils.	Per cent of population.	Pupils.	Per cent of population.
Elementary:						
Public	12,494,233	19.95	14,821,999	19.60	15,788,598	19.12
Private	1,516,300	2.42	1,240,925	1.64	1,230,661	1.50
Secondary:						
Public	221,522	.35	530,425	.70	695,969	.85
Private	145,481	.23	188,816	.25	180,061	.21
Higher	135,242	.22	236,575	.31	265,166	.32
Total	14,512,778	23.17	17,020,710	[illegible]	18,160,475	22.00

It appears from these tables that the average length of a school year has been steadily increasing, from one hundred thirty-two and two-tenths days in the year 1869–70 to one hundred fifty and nine-tenths days in the year 1904–5. In the same period the per cent of the school population enrolled in the schools has increased from 57 per cent in 1869–70 to 70.35 per cent in the year 1904–5. The percentage of the enrollment in average daily attendance, too, has increased in this period from 59.3 per cent to 69.7 per cent. The percentage of the total population enrolled in the schools has declined slightly for several years past, and for the year 1905 fell below 20 per cent for the first time in seven years. This slight decrease in the percentage of enrollment, however, is more than made up by the increase in the average length of the school term, which passed one hundred and fifty days for the first time in the year 1904–5, and by the percentage of average daily attendance, which in the same year for the first time rose above 70 per cent.

It is to be noted that not only the percentage of male teachers in whole teaching body has steadily decreased for many years, but

for the past five years the total number of male teachers employed in the schools has actually declined, in spite of the great increase in the total number of teachers employed and the total number of pupils enrolled. Attention should, however, be called to the fact, which appears from the statistics of city school systems, that during the years 1902 to 1905 there has been a gradual increase in the number of male teachers employed in city schools, and the percentage of increase in this item for the year 1904–5 was greater than the percentage of increase in the number of female teachers.

The relative amounts of schooling given in each of the different census divisions at different periods since 1880, measured in school years of two hundred days each, is shown in Tables IV*a* and IV*b*. It appears from these tables that if enrollment and attendance should hold the same percentage to population for thirteen years that it held during the year 1905, each inhabitant on an average would receive five and thirty-three hundredths full years of schooling, or one thousand sixty-six school days; or in other words, the number arriving at the school age of 6 years would, on the completion of their eighteenth year, if their average attendance per year had been the same as that of all the schools of the nation, public and private, as reported for 1905, have attended school one thousand sixty-six days. Table IV*c* shows the average amount of schooling in days, as estimated in this manner, at different epochs beginning with the year 1800.

TABLE IV*a*.—*Average number of years of schooling (of 200 days each) that each individual of the population received at the different periods specified in the table, taking into account all public and private schooling of whatever grade.*

	1880.	1890.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903. [a]	1904. [a]	1905. [a]
The United States...	3.96	4.46	4.99	5.09	5.20	5.09	5.23	5.13	5.18	5.17	5.21	5.33
North Atlantic Division.	5.69	6.05	6.67	6.84	6.95	6.90	6.96	6.96	6.81	6.87	6.89	7.09
South Atlantic Division...	2.22	2.73	3.01	3.07	3.32	3.11	3.26	3.41	3.46	3.46	3.55	3.53
South Central Division .	1.96	2.42	2.87	3.03	3.04	3.09	3.21	3.02	3.11	3.10	3.14	3.06
North Central Division.. .	4.65	5.36	6.00	6.01	6.15	6.01	6.18	5.97	6.07	6.01	6.01	6.20
Western Division..... .	4.17	4.57	5.66	5.90	5.85	5.42	5.53	5.61	5.87	6.07	6.47	6.96

[a] Subject to correction.

TABLE IV*b*.—*The same, taking into account only the schooling furnished by public elementary and secondary schools.*

	1880.	1890.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903. [a]	1904. [a]	1905. [a]
The United States...	3.45	3.85	4.43	4.53	4.63	4.55	4.66	4.57	4.67	4.67	4.69	4.78
North Atlantic Division...	4.84	4.99	5.64	5.78	5.88	5.85	5.91	5.88	5.97	6.00	5.98	6.16
South Atlantic Division..	1.90	2.42	2.74	2.79	3.05	2.83	2.95	3.10	3.15	3.18	3.25	3.21
South Central Division ...	1.57	2.20	2.59	2.75	2.76	2.81	2.91	2.74	2.84	2.85	2.91	2.80
North Central Division.. .	4.19	4.67	5.35	5.40	5.51	5.41	5.57	5.40	5.51	5.43	5.39	5.55
Western Division..... .	3.57	3.96	5.12	5.36	5.34	4.96	4.99	5.01	5.36	5.54	5.85	6.35

[a] Subject to correction.

TABLE IVc.—*Average entire amount of schooling, public and private, since 1800, at different epochs, given in days (partly estimated).*

	Days.		Days.
1800	82	1870	672
1840	208	1880	792
1850	420	1890	892
1860	434	1905	1,066

REPORTS OF THE MOSELY EDUCATIONAL COMMISSION.

The tendency to the exchange of opinions and experiences in respect to education is one of the most significant signs of the growing sense among nations of their common interests. The relation of our own country to this general movement is illustrated by the recent visits of the Mosely Commissions to the United States, namely, the industrial commission of 1902 and the educational commission of 1903. The investigations carried on by these two companies of chosen men are impressive also from the private origin of the commissions, their systematic conduct, and the published reports which have given permanent form to the observations and opinions of their members.

The report of the educational commission, published in England at the expense of Mr. Mosely, was limited, and naturally could not reach the great body of teachers and school officers in this country deeply interested in its contents. Chapter II, presenting in condensed form the substance of the portions of the report pertaining to our schools and colleges, is an endeavor to meet repeated requests which continue to come to this Office for information as to the final opinions of our English visitors.

The particular significance to this country of the educational commission is indicated by Doctor Harris in a review of the report included in Chapter I. Commenting upon Mr. Mosely's own statement, that the idea was suggested to him by the success of the engineers from the United States whom he had known in South Africa, and his desire to see "what sort of country it was that was responsible for sending so many level-headed men to the Cape," Doctor Harris says:

> The occasion put forward as the ground for the appointment of the commission is in itself a delicate but overwhelming piece of national flattery—in a good sense of the word "flattery." For it assumes as the most real of facts an achieved greatness of the United States in industry and commerce and seeks to find its source in a self-conscious and reasonable preparation for it on the part of our people in the education of the rising generation.

In view of such recognition manifested by the Mosely Commission, and by similar investigations and inquiries emanating from other European nations, it would seem that it rests in a peculiar sense with

this country to show how education—or rather the education of the masses—may conduce to the welfare of democratic societies under the conditions of modern industry. In order that this mission may be worthily fulfilled, it is important that we should repeatedly examine our present system and methods in the light of the criticisms that these excite in the minds of discerning and appreciative foreigners. Our school systems—for though animated by a common spirit they are as many in number as the States of the Union—are extremely flexible and may therefore be readily improved as the need is shown.

Many members of the Mosely Commission came to the opinion that the educational activity of our country arises like its industrial prosperity from the energy naturally excited by its vast natural resources. Mr. Mosely himself differed from this opinion. It is interesting to note that his personal observation deepened the impression that he had formed by contact with the American engineers in Africa. Their power of initiative seemed to him to imply some distinctive quality in their training. This idea accords also with that expressed by Doctor Harris in the analysis of our educational tendencies comprised in his review of the report of the commission already cited. (See p. 1.) With us the essential purpose of education is the preparation of all the people for the conduct of affairs. The instinctive regard for this end, as the all-important one in a democratic society, makes it the more necessary that those engaged directly in the work of education should be often reminded of the value of details, of that "thoroughness of specialization" which, as Doctor Harris observes, "has its place in reenforcing the present moment by the application of the lessons of past experience."

The recorded observations and reflections of the members of the commission relate substantially to the two lines above indicated—that is, to the prevailing spirit of our institutions on the one side and on the other to the details of their internal conduct, especially the conduct of studies. Their joint report shows general approval in respect to the first of these considerations. (See Chapter II, pp. 19.) Criticism begins when the inner workings of our schools and colleges are discussed; here the different members speak as experts, sometimes indeed with a noticeable bias due to English experience, but more often from the higher standpoint of ideal excellence, for which reason their strictures deserve our most careful attention.

The open and impartial spirit in which the investigations were conducted is illustrated in the comments upon the free high schools of the United States. In general, the members of the commission were profoundly impressed by the ample opportunity which these schools offer for prolonging the period of general education and by the freedom with which our people avail themselves of the same. This provision,

considered in the completeness of its adjustments to varying demands, was apparently regarded as the most suggestive feature of our public school system.

With respect to the strong and the weak points in the conduct of our high schools the several reports show also very general agreement. Their average opinion is fairly represented by the citations from the report of Rev. H. B. Gray. He notes, in particular, defects in the teaching of foreign languages, ancient and modern, in contrast with the general excellence of the instruction in English, and the admirable teaching of science by the aid of "magnificent apparatus and liberality of space." (See p. 29.)

Mr. Armstrong and Mr. Fletcher, in common with several of their colleagues, call attention to the waste of time by deferring the entrance of pupils upon "the more difficult and testing subjects that belong to a secondary curriculum until they are 14 years of age."

"It is quite clear," says Mr. Fletcher, "that the American system does not solve the question of coordination. By preventing overlapping it merely ignores the difficulty, and until the difficulty is fairly met it will remain a serious impediment to really good work." (See p. 29.)

Among other subjects covered by the citations in Chapter II are manual training and business high schools and the higher institutions for technical and agricultural education.

The value of this report to ourselves is greatly enhanced by the fact that, being intended primarily for the information of English educators, its judgments are naturally expressed in comparative terms. Thus, incidentally, English standards and processes are reflected in the discussion of our own with the result that, while studying the report, it is easy to keep in mind the different conditions under which the two nations are working out problems of common interest.

RHODES SCHOLARSHIPS.

Chapter III, on the Rhodes scholarships, gives a brief account of the method adopted by the trustees for giving effect to the provisions of the Rhodes will, as far as it related to the United States, the measures taken by Doctor Parkin, their agent, for carrying out the plan of the trustees, and the acceptance of the opportunities offered by the will, as far as can be shown by the number of scholarships secured. The examinations for these scholarships are practically identical with that known as "responsions," usually taken soon after matriculating at Oxford. The examinations mainly consist in translations from Latin and Greek authors into English, including passages from Cicero, Cæsar, Horace, Virgil, and Livy in Latin, and Homer, Demosthenes, Euripides, Sophocles, Plato, and Xenophon

in Greek. There were, besides, a translation of an English passage of considerable length into Latin, questions in Greek and Latin grammar, and a number of arithmetical, geometrical, and algebraical problems. That so many candidates were able to pass successfully the classical examination of the character shown in the list of passages here published is creditable to their scholarship, and they come from nearly every State in the Union, the new as well as the older portions of the country being now represented in the colleges of Oxford. A list of the names of the successful candidates for the scholarships of 1904 and 1905 is given, together with the States they came from and the colleges to which they were assigned at Oxford.

EDUCATION IN FRANCE.

Chapter IV, relating to education in France, brings the record of that department of public affairs to the close of a period which has been marked by the struggle between church and state for its control. The Falloux law of March 15, 1850, which received the sanction of Louis Napoleon during the brief period of the Second Republic, established the principle of liberty of teaching (enseignement libre) and thus enabled the church, or more especially the religious associations (brotherhoods and sisterhoods), to regain the position wrested from them by the revolution of 1789.

The influence of the clerical teachers has been viewed with distrust and apprehension by the Republic, which by the laws of July 1, 1901, and July 8, 1904, subjecting the associations to civil control, virtually ended the advantages secured to them by the law of 1850.

Chapter IV shows how the organization and centralized power of the system of public instruction have rendered it an efficient instrument for accomplishing the purposes of the Government in regard to this matter. The main features of the system are derived from the university system of Napoleon, which resembled very closely the organization of the Roman Church. The relative strength of the two forces in the educational domain, namely, the state and the church, at different times, is indicated by the tables of comparative statistics presented with explanatory context in Chapter IV.

It will be seen by reference to Tables II and III (pp. 61, 62), that the proportion of pupils enrolled in primary schools belonging to the religious orders, which reached its maximum, 44 per cent, in 1877, just before the present Republic began its active work in education, has steadily declined under the pressure of Government measures, falling to 20 per cent in 1902. The proportion of teachers in public primary schools belonging to the religious orders also declined, especially after the passage of the law of 1886 providing for their gradual exclusion from the public service. By 1902 there were no men teachers of this class in public schools and only 10 per cent of women

teachers; but meanwhile there was an increase of clerical teachers in the private primary schools, the proportion of such teachers in 1902 being for men 89 per cent of the total and for women 87 per cent. (See Tables V and VI.) The significance of this fact lies in the close relation of the private schools to the church authorities.

It will be seen further by reference to Table XV (p. 77) that the number of students in the classical colleges under the control of the religious orders steadily increased from 1887 to 1901; in the latter year they registered 13,000 more students than the State lycées. This constant extension of clerical influences in the education of the young explains, in great measure, the present attitude of the Government toward the powerful congregations or religious orders. It is a matter deeply involved with the whole political movement and social life of France, and therefore all facts pertaining to it assume a universal interest.

Although the political and administrative policies pertaining to the system of public instruction in France have been the objects of chief attention on the part of the Government for nearly two decades (dating from the law of 1886), there has been during the time great and significant progress in the treatment of professional problems. The provision made in the organized system for guarding these interests from sudden and capricious changes, as explained in Chapter IV, is one of the most instructive lessons that France offers to the world. In particular, the influence of the superior council of education is seen in the recent formation of a permanent consultative committee in the English department of education, which, like the "comité consultatif," advisory to the French minister of public instruction, secures for the service of national education the counsels of men and women of large experience and recognized distinction in this special field of activity.

Guided thus by opinion formed with great deliberation, and with due regard to the views of the professional corps affected, changes of great moment have been recently accomplished in the curriculum of secondary schools (classical lycées) of France, as explained in Chapter IV (pp. 77–78); the universities have also been transformed from professional faculties in the State system to corporate bodies with independent powers. The effect of this change in stimulating local support for the universities and in promoting special courses of instruction in the sciences applicable to local industries is already seen in increased attendance upon the provincial universities. In 1887 the University of Paris attracted more than half the whole body of students in France; in 1905, although the registration in the former had increased by more than one-third, the proportion of its students had fallen to two-fifths of the total number registered in all the universities. (See Table XVII, p. 81.)

Efforts for the continued instruction of the laboring classes after the school age is past, and for exercising a restraining and helpful influence over the young suddenly removed from school control, have grown to large proportions in France, as shown in the chapter here considered. Although due generally to private initiative, these efforts receive encouragement and support from the Government.

The tendency in France to bring every activity pertaining to education under Government control or regulation is strikingly shown by the gradual organization of technical and industrial education under the charge of the minister of commerce and industry, the minister of agriculture, etc. This division of responsibility in respect to the various departments of education has not, however, proved altogether satisfactory. It tends to produce confused classification, duplication of agencies, and waste of resources. The proposition to concentrate the entire educational work of the Government under one ministry recently laid before the Chamber of Deputies, as explained in Chapter IV (p. 83), is supported on both economic and professional grounds.

The appropriation of the central Government for the current expenses of education, under the charge of the minister of public instruction, amounted in 1905 to $47,400,000. The appropriation to other ministers for the same service would raise the total to above $50,500,000. In 1902, the latest year for which complete financial reports have been made, the cost of primary education alone to the State and local authorities exceeded 238,000,000 francs ($47,600,000). Compared with the expenditure from public funds for the same service in 1877, viz, 89,500,000 francs, the later expenditure shows an increase of nearly 170 per cent in twenty-five years.

TEACHING OF AGRICULTURE IN FRANCE.

The importance of agriculture in a country like France, where the greater proportion of the people are engaged in its pursuit, and the cultivated lands are chiefly in the hands of small owners, has been distinctly recognized in all plans for the promotion of popular and industrial education, whether formulated by the Government or proposed by the leaders of public opinion, from the revolution of 1789 to the present time. This recognition, combined with the philosophical spirit in which the French approach every problem of education, and the practical impulse which leads them, the moment a subject is included in the school curriculum, to consider its adaptations and determine its appropriate place and bounds, imparts special interest to the subject treated in Chapter V, namely, the teaching of agriculture in the schools of France.

As a part of the new development of education for the masses, the third Republic established schools of horticulture and agriculture as early as 1873; in 1876 the Institut National Agronomique was

reopened, and in 1879 the Government programmes included the elementary principles of agriculture among the obligatory subjects of primary instruction. The classification of the subject having been thus accomplished to accord with the three grades or departments of education, its practical development was left largely to the influence of local circumstances and the scientific impulses of the age.

The course of instruction in agriculture adapted to the primary schools of France, which is given in detail in Chapter V (pp. 88–90), shows a well-developed theory of the subject in its relation to the capacities and circumstances of pupils in the rural schools. In many cases, too, the instruction has been fruitful of good results. This is especially true in respect to the normal schools for men, the course for which schools is an expansion of that for the primary schools. (See pp. 90–91.)

Up to a recent date, however, the instruction in agriculture in primary schools has, in general, been little more than a lifeless form or a series of crude experiments in gardening. The exposition of 1900 gave occasion for renewed efforts in this direction; a school garden was maintained on the grounds throughout the entire period of the exposition, with daily demonstrations and simple lessons under the direction of the able inspector-general, M. Leblanc. This object lesson excited the enthusiasm of visiting teachers and pupils from all parts of the country and has given new impulse to the teaching of agriculture, even in districts remote from the capital.

The schools and institutions in France for teaching practical agriculture or for promoting its scientific development are classified in two groups—higher and secondary. (See p. 92.)

To the latter class belong the schools of agriculture, horticulture, and dairy work which have been established in various parts of the country. In some respects these schools are comparable to the agricultural colleges of our own country, or rather to the technical departments of those colleges by which they are differentiated from the older classical colleges. The French schools, however, are more narrowly specialized, and on the academic side limit their training to modern languages, literature, science, mathematics, and drawing.

The National Agronomic Institute, of which an extended account is given in Chapter V, illustrates the scope and significance of science in its applications to agriculture and the purpose of the Government to bring to the service of this fundamental industry all the resources of modern research applicable to the subject.

The references in Chapter V to the well-known report of Mr. Brereton embodying the results of his investigation of the rural schools of northwest France[a] bring to view the marked differences between the

[a] The Rural Schools of Northwest France, by Mr. Cloudesley Brereton, M. A., L.-ès-Lettres, vice-president of the jury on primary education at the Paris Exposition, 1900, special reports on educational subjects, published by the board of education, [illegible] 7.

conditions surrounding rural schools in his own country and in France, by which contrasts the author emphasizes the importance of adapting theories and methods of industrial training to local conditions. Chapter V also includes a brief outline of the scheme of agricultural education in Belgium, showing plainly the influence of French precedents. In Belgium conditions have been more favorable than in France for the practical development of the subject in the primary schools.

EDUCATION OF BUSINESS MEN IN GERMANY.

Chapter VI contains an account of higher education for business men in America, given by Dr. J. Jastrow, private docent in the University of Berlin. Sent by the chamber of commerce of that city to investigate our American manner of preparing young men for business life, he examined not only our business schools, but also the colleges, and attempted to arrive at a clear comprehension of the character of our college education. The author's report abounds in evidence of shrewd observation, in clear statements, and fair comparisons between German and American educational institutions. He was subsequently called to be the head of a commercial college established by enterprising Berlin merchants and industrial men. In his book, entitled "Bericht über eine volkswirthschaftliche Studienreise durch Nord-Amerika," he devoted a chapter exclusively to education and showed the principle underlying all American educational institutions, namely, that specialization, in this case commercial specialization, should never be separated from general education, and especially should not precede it; that the commercial student should not, as is done in Germany, go through a period of apprenticeship, but continue the course of his secondary and college work, and then enter the countinghouse. In other words, he finds that the American does not, early in life, predestine his career, but works ahead in laying the foundation of his education, and thus prepares himself for a variety of pursuits. This gives the American merchant a social standing which the German merchant ordinarily can not claim and does not obtain. The author enters into an analysis of the work and methods of specifically commercial higher institutions in his country, and points out their undoubted merits, as well as the weaknesses of minor institutions which are great in name only. His admiration for the fact that in America the merchant is socially the equal of the professional man is outspoken, and he accounts for it by his having acquired a college education. He is particularly felicitous in comparing the historical background of the German with that of American professional preparation. In describing the various departments of a commercial activity, he lays much stress on the importance of the business of transportation, and shows the value of a general, all-sided preparation for that business. He notices also the happy co-operation

of the specifically business college with actual life, and with its representatives, who are called upon to contribute the results of their experience and gladly give it from the rostrum and in the press. The democratic spirit in our higher seats of learning, among other more vital things, charmed him. He arrives at the truth, well attested in the history of education, that no nation can minutely copy another's course of development, but that each one must go its own way, while keeping in mind fundamental principles common to all.

EDUCATION IN LIBERIA.

The account of education in Liberia in Chapter VII was prepared by Mr. George W. Ellis, the U. S. secretary of legation at Monrovia, Liberia. Mr. Ellis first remarks upon the growing disposition of the civilized countries to exploit the Tropics, and points out the importance of West Africa, and in particular of Liberia, on account of the actual natural productions and the possibilities of that country. As to government, Liberia is an independent negro republic, with a population of 1,500,000, of whom 25,000 are emigrants from the United States and their descendants. "Planted by the American Colonization Society in 1820, Liberia declared its independence in 1847. In language and institutions the Liberians are strongly attached to the United States. Their efforts to educate themselves and to assimilate their native brethren ought, therefore, to be of interest to the American people."

There are three separate systems of education in Liberia, one maintained by the Methodist Episcopal Church of the United States, another by the American Protestant Episcopal Church, and a third by the Liberian Government. The schools of the first are scattered throughout the country and are 26 in number, with 43 teachers and 932 pupils. This includes the College of West Africa, at Monrovia, with 119 students and 8 teachers, and a seminary with 110 students and 3 teachers. About 50 per cent of the students in the schools are native Africans. The schools of this missionary society date from 1833. The total appropriation of the Liberian mission is now only $13,000, out of which the teachers are paid. They are generally Liberians and receive only about $75 per annum, not as a salary, but as a contribution, while they look to some other occupation for their main support. The salaries at the college and seminary range from $300 to $1,000 per annum.

The Protestant Episcopal schools date from 1834. They comprise four principal schools, one of which includes a collegiate department and a divinity school for young men, and three are schools for girls. The rest are parish schools, which are grouped about these larger institutions. In all there were 50 schools and 1,490 scholars in 1904, of whom 73.5 per cent were native Africans. The entire system is

under the supervision of a bishop, resident in Liberia. The salaries of the teachers of the parish schools range from $150 to $300 per annum, the total appropriation of the Protestant Episcopal Church for Liberia being $40,000.

The Government schools are administered by a superintendent of public instruction and a bureau of education. In 1903–4 they numbered 100, with 100 teachers and an attendance of 3,221, of whom 803, or 24.9 per cent, were native Africans. From 1900 to 1904 the annual appropriation for schools increased from $18,650 to $24,250, the last year's appropriation showing an expenditure of $7.17 per pupil.

Liberia College is attended by both young men and young women students. Its attendance in 1904 in the college department was 25 men and 15 women. There are four departments in all, preparatory, collegiate, law, and industrial, with a total attendance of 120 and 12 professors. The funds for the support of Liberia College came mainly from the Boston Board of Trustees until 1890, when the institution was taken in charge by the Republic of Liberia. Since 1900 the total expenditure has amounted to $97,188.48.

Besides the school systems just mentioned the Baptists maintain 3 schools and the Lutherans 6, the latter with 144 pupils (all native Africans) and 11 teachers.

Industrial training was introduced into Liberia through the mission schools. Students are now taught building, carpentry, masonry, brick-making, farming, and the cultivation of cotton, ginger, and rubber. Some also learn printing, and the girls domestic economy, housekeeping, dressmaking, and fancy work.

CONGRESS FOR THE REPRODUCTION OF MANUSCRIPTS.

Chapter VIII pertains to the congress for the reproduction of manuscripts, coins, and seals, held in Liége, August 21 to 23, 1905, in connection with the International Exposition of that year. It was prepared by Professor Charles Mills Gayley, of the University of California, a delegate from the United States to the congress, and well known both in this country and in Europe for his efforts to devise means of securing, for the use of American students, facsimiles of rare manuscripts and books, which are at present wholly inaccessible to investigators on this side the Atlantic.

The special needs of American students in this respect reinforced the arguments in support of international action in the matter which appeal more directly to European advocates of measures proposed for this purpose. The latter, as a rule, are more deeply impressed with the importance of duplications of the precious records of the past, now guarded in libraries, official archives, museums, etc.,

as a means of preventing their utter loss by decay, mutilation, theft, or other destructive agencies.

The subject is one of long-standing interest, as is illustrated by the fact noted by Professor Gayley in his report, that three centuries ago the first attempt at manuscript reproduction was made in Belgium by one of the founders of the society of "Bollandists," which was ably represented in the present congress.

Up to the time that the Belgian Government issued the call for the Liége congress efforts to excite interest in the general subject to which it pertained had been confined almost wholly to scientific societies and individual scholars, professors, and librarians, who were constantly reminded of its importance by their own pursuits and experiences. The review of these efforts by Professor Bergmans, assistant librarian in the University of Gand, was one of the most interesting papers presented before the congress.

The results of these efforts were apparent from the great number of eminent men participating in the congress and the thorough manner in which the various phases of the subject—the history of the reproductions already accomplished, the processes employed, plans for the indefinite multiplication of copies and for effecting exchanges, were presented.

It is evident that a scientific work of the extent proposed, affecting also valuable properties belonging to governments as well as to institutions and individuals, can not be accomplished without the cooperation of governments themselves and the aid either of public appropriations or of princely endowments and bequests.

Reference is made in the report to the appeal made to the French Chamber of Deputies, in February, 1904, for a special appropriation of 100,000 francs ($20,000) to be placed at the disposal of the minister of public instruction for the photographic reproduction of the principal manuscripts preserved in the great libraries and national museums of France.

The plan submitted by Professor Gayley for the formation of an international bureau for the general direction of the work of selecting, reproducing, and distributing rare and valuable manuscripts, was presented in detail and received the general approval of members of the congress. The active participation of the official delegates from the United States in the deliberations of the congress increased the hope that this country may make some substantial contribution to a work of ever-growing importance to scholars and historians and to men charged with diplomatic missions.

A practical outcome of the conferences was the designation of a permanent international committee to further the proposed objects. The committee includes, for the United States, Professor Gayley and Dr. Herbert Putnam, Librarian of Congress.

NEW YORK SECONDARY SCHOOL SYSTEM.

In Chapter IX is reprinted an address of Andrew S. Draper, New York commissioner of education, delivered at Syracuse, December 28, 1904, on the New York secondary school system. The high place which this State system, operating under the corporate name of the University of the State of New York, occupies among American institutions, and its large influence upon educational development throughout the country, give additional value to this intrinsically serviceable paper. The evolution of the modern public high school up through the grammar school of colonial times and its successor, the academy of the post-Revolution period, progressively choosing the best and eliminating the least serviceable features, forms an ever-interesting phase of educational history. New York's chief contribution to the development of the principle of public education has been undoubtedly to the field of secondary education. The relation, past and present, of the New York system to this branch of instruction is highly instructive, according as it does with the best American ideals, and fostering as it does the principle of self-help, local self-respect, and community initiative in educational affairs. The movement for good secondary schools in New York was almost simultaneous with statehood, and the State's interest in such schools and its influence in their upbuilding has been exerted with great constancy and excellent effect. State aid here first took the form of subsidies to chartered academies, and such subsidies were increased with the growth of the literature fund, created in 1813. It must be understood, however, that the State has never aimed at complete control, nor at complete support of high schools, but rather at affording intelligent and needed assistance at the proper time and place, and at giving such stimuli to local activity as would cause the growth among individual communities of an increasing, persisting, and virile interest in this type of education. The policy thus pursued has resulted in a system of great flexibility and in a healthy public interest in these schools.

ART AND INDUSTRY.

The influence of art education upon the industrial development of our country is the topic treated, in Chapter X, by Halsey Cooley Ives, director of the art exhibits at the universal expositions held at Chicago in 1893 and St. Louis in 1904. Mr. Ives states that he has in this chapter brought together, for the consideration of practical men, some of the more practical suggestions for the advancement of art education. He lays down at the outset as general principles that truth is more naturally and effectively impressed upon the mind through the medium of pictorial representation than through presenting a mass of facts to be laboriously digested; and that the study of nature through art develops progressively the power of observation.

The growth of a love of art among the wealthier classes has been of late years quite rapid, but the application of art to the products of industry has until recently received comparatively little attention. Much has been said and written about industrial art, but little done. The institutions engaged in work in this direction are few in number. Yet the purpose of art education is not alone to add to the means of enjoyment of the few who are rich; it should aim as well to give greater value to the products of the workingman and to contribute to the elevating of American industries as a whole and the enrichment of the life of the people. The application of artistic knowledge in industrial callings must be developed. It is not desired that the potter or the cabinetmaker should model statues or paint pictures, but that each object for common use that either makes should be beautiful in form and workmanship. "Every normal person prefers between two articles of household utility equally suited for their mechanical purpose the one which is beautiful rather than the one which is ugly." The appreciation of art is universal, and our art institutions, as they become enabled through more abundant resources to increase their activities, will constantly tend to occupy a broader field.

In Mr. Ives's opinion, the extension of the activities of art museums in new directions is the branch of educational work in art which promises most for the future. In order to influence directly the great mass of people, the art school and the museum should work in unison, and their activities should be amplified and extended. The popular mind conceives of a museum to-day as a place for the exhibition of curiosities; it should become rather a great educational center, from which enlightenment concerning art can be transmitted to every individual within the reach of its influence, to all manner of workers as well as to artists and art students. This seems to be the direction in which our museums are moving to-day. Various means are proposed to bring this about, such as lectures in the galleries, designed to give visiting students a general understanding of the works on exhibition; teachers, to guide students wisely in developing their artistic capabilities; class rooms, where books of reference, methods, and objects may be considered in greater detail and more intimately than in a public gallery; the extension of active practical work into the schools and the homes of the people.

The work of art museums and art schools has been handicapped in some degree through popular misconception of what is comprehended under the term "art," as if it were something apart from and had no application to ordinary life. The general public has consequently had no proper understanding of these institutions, perhaps has been to some extent prepossessed against them. To a person who looks upon an art school as only a place where pretty things are studied or

made, it comes as a surprise to learn how much his household furniture and the objects and utensils he daily makes use of are indebted to the artistic sense of the persons who designed them for whatever beauty of form or adaptation to end they may possess.

For the lack of any proper comprehension of art on the part of the people at large, Mr. Ives holds many of our so-called art schools to a great extent responsible. "They have slighted the applied arts, looked down upon the craftsman," and "have trained a multitude of eager students to only paint pictures that few men want and fewer buy;" they have held themselves aloof from the many. This is not the case in countries where art is taught in the proper spirit, and should not be so here.

A strong plea is made for more art in our common schools, as being what is needed, rather than more art schools. Only by giving one generation of school children art instruction through the whole common school course can a proper foundation for a general appreciation of art be laid. The school museum of art is one of the principal agencies to this end that Mr. Ives suggests. The children should not be trained as artists, but taught to appreciate beauty, and in some degree to produce it.

An account is given of the museum extension undertaken some years ago by the St. Louis School and Museum. This work took the form of circulating collections of reproductions of masterpieces, by means of which opportunity to study art was placed before thousands who could not travel to the museum. These collections were circulated for years throughout the West, being exhibited in schoolhouses and halls, and lectures were given which the exhibits served to illustrate.

Notice should be taken of the special Saturday and holiday classes conducted by certain art schools and museums for the benefit of public school teachers, in connection with which special collections have been installed. The Brooklyn Institute of Arts and Sciences has done good work of this character. Special lectures and classes for workingmen constitute another feature of the attempt to popularize art. Sunday morning lectures for mechanics in the galleries of the St. Louis Museum, "the objects of applied arts being used for illustration, have been well attended and influential in improving local standards of workmanship in certain directions, notably in wrought-iron work."

That the introduction of these various forms of art educational work may have a beneficial effect upon the industries of a nation is well attested by the experience of other countries. The practical results of the English system, having its center at the well-known South Kensington Museum, have served to stimulate efforts in this direction over a large part of the continent of Europe, which have been attended with such success that Germany, Belgium, and Holland

have reaped rich rewards through the practical application of the principles of art in designing industrial objects of every character.

Mr. Ives classifies institutions and other agencies for art education in the United States under five heads, as follows:

1. Museums or galleries of art apart from art schools, for the display of works of art to visitors.

2. Schools of instruction apart from museums or galleries, where technical instruction is given to professional students.

3. Museums combined with schools. In these instruction is given not only to regular students, but to the public, by lectures before the objects. The Art Museum and Museum School of Boston are cited as examples.

4. A fourth type, and one which is perhaps the most effective, is the combined school and museum established as an integral part of a liberal university. The Yale Art School, the art department of Syracuse University, and the St. Louis School and Museum of Art are of this class.

5. In a fifth group are included societies, clubs, and other organized agencies which work for art education.

It is in the West that there has been the greatest development of the system of combining in one institution the educational work for the general public and that for students. The Chicago Art Institute, which is conducted on this system, is mentioned as having especially influenced the people of its home city and the neighboring country.

The great progress which has been made in recent times in utilizing the forces of nature in the service of man has given rise to a multitude of new machines, tools, utensils, and objects of all kinds which have been designed primarily from a purely mechanical point of view. It is the study of art educators of the present day to give to all these productions whatever added value may be attached to them from being objects of beauty as well as of utility. "I can not see," says Mr. Ives, "why the harvesting machine need in itself be a less interesting or beautiful thing than the reaper's sickle" which it has supplanted. He explains how William Morris and his collaborators were dominated by a similar thought when they effected in England the industrial revolution which has had so great an influence on this country, as well as Europe. Cardinal Wiseman contributed to the same movement in his epoch-making lecture of some fifty years ago, in which he endeavored to show that the arts of design and the arts of production are inseparably connected.

That art plays an important part in promoting industrial development is strikingly illustrated in the case of France, and in the even more notable industrial advance of Germany. The great national prosperity of France was attributed by a German minister of commerce to the instruction given in trade and other schools and applied

by their students to industrial production, and it was due largely to his initiative that a similar system was introduced into Germany, with results that are a matter of common knowledge. The "Bank of England chair" and the Morris patterns for fabrics also furnish illustrations of the influence of art upon industrial production. For further evidence Mr. Ives quotes examples from a paper entitled "Art education the true industrial education," by the Honorable W. T. Harris, who emphasizes in particular the change that was wrought in the manufacturing industry of England by transforming the workman from an artisan pure and simple into an artist.

CURRENT TOPICS.

Chapter XI contains summarized statements on certain subjects of current interest which are discussed from year to year in the Commissioner's Annual Report. The table giving the statutory provisions of the various States relating to compulsory school attendance and child labor has been revised so as to embody recent legislation, including two comprehensive measures of importance, viz., the child-labor laws of Georgia and Iowa. In Georgia it is forbidden after August 1, 1906, to employ children under 10 years of age in any manufacturing establishment under any circumstances. On the 1st of January, 1907, this limit will be raised to 12 years, except in certain specified cases where the earnings of a child are needed for his own or his parents' support. Moreover, after January 1, 1908, a specified degree of education or length of school attendance will be exacted up to the age of 18 as a condition of employment. The Iowa law is more comprehensive and forbids the employment of children under 14 in mines, manufacturing establishments, shops, laundries, elevators, etc. Both of these laws, in addition, restrict the hours of labor of children. Kentucky and New York have, by amplifying the provisions of existing laws, further restricted the labor of children, and Massachusetts has prescribed a standard for those who are required to be able to read and write as a condition of employment.

In the District of Columbia the annual period of required school attendance has been extended so as to include the full school term. Of the 36 States and Territories now having compulsory-attendance laws, 25 require the children subject to them to attend whenever the schools are in session, and in one other (Kentucky) this provision is in force in cities. The practice of requiring attendance through the entire school term has grown up within a very few years and bids fair to become in time the settled policy of all the States having compulsory-attendance laws.

From the statistics relating to religious exercises in the public schools, in the same chapter, it appears that out of 1,098 cities reported religious exercises are forbidden in 162 and permitted in 936; such

exercises are actually conducted in 830, or something more than three-fourths of the whole; and in 818 the exercises include reading from the Bible. It is interesting to observe to how much greater a degree this custom prevails in the Eastern as compared with the Central and Western States. In the two eastern divisions (North and South Atlantic) religious exercises are conducted in 478 out of 528 cities, or 90.5 per cent; in the North and South Central and Western divisions in 352 out of 570 cities, or 61.7 per cent. In the Western division alone, the percentage is only 13.6. In the same division religious exercises are specifically prohibited in 49 cities out of 66, or about three-fourths.

The table in Chapter XI, giving an abstract of the regulations relating to corporal punishment in cities of 100,000 inhabitants and over, is worthy of notice. Of the 39 cities included in this table corporal punishment is unqualifiedly forbidden in 9, is confined to grades below the high school in 4 others, and is forbidden in the case of girls in 3. In those cities in which it is at all tolerated it may be inflicted only under special circumstances, and the practice of it is so hedged about with precautionary measures that it is probably resorted to but rarely.

INSTRUCTION IN FORESTRY.

With the adoption of a more settled policy of forest preservation on the part of the National Government and of the State governments, there has arisen the need of a body of trained experts in the scientific administration of forest reservations. This want a considerable number of higher institutions have from time to time endeavored to meet by the extension of their curricula so as to include some instruction in forestry or by the establishment of special forestry courses. A list of these institutions is given in Chapter XII, together with the number of years occupied by the course in each case and the time devoted to the different branches of the subject. Of the 44 institutions in which instruction in forestry is given, a large majority—37 in all—are agricultural and mechanical colleges established under the land-grant act of 1862. In most of these the instruction is given in connection with existing courses in agriculture or horticulture; there are 6 institutions, however—5 State universities and 1 agricultural college—that have full four-year undergraduate courses in forestry, and 2, Yale University and the University of Michigan, have graduate courses for advanced students who have had a thorough preparatory training in the underlying sciences. As a result of the efforts of these institutions, there should soon be available for the service of the Federal and State governments and of private corporations an adequate number of trained foresters, such as have long existed in Germany and France, skilled in forest management and in utilizing our forest resources to the best advantage.

THE AMERICAN SYSTEM OF AGRICULTURAL EDUCATION.

Chapter XII also contains a brief but comprehensive statement of the different agencies which collectively form what may be termed the "American system of agricultural education and research." This statement has been prepared by Dr. A. C. True, director of the Office of Experiment Stations of the United States Department of Agriculture.

Following the historical sketch which prefaces the paper, the various classes of instrumentalities and institutions which provide agricultural education are taken up in turn, beginning with the Department of Agriculture and the agricultural experiment stations, which Doctor True places at the head of the system. These constitute, so to speak, the university department for advanced study and the discovery and dissemination of new truths. Next in order come the agricultural colleges, mostly endowed with the national grant of lands, and nearly all having a course of four years or more. These vary much in their courses and entrance requirements. In some cases students are admitted directly from the elementary schools. The tendency, however, is to raise the standard of entrance to the level of that of the liberal courses in high-grade colleges. As the number of students and the income of these institutions increase, the tendency to differentiate and to offer groups of electives shows itself, resulting in the organization of special faculties and of courses in horticulture, animal industry, etc. Short and special courses are also offered by 44 of these institutions to students who are unable to complete a full college course.

The agricultural high school forms Doctor True's third class, and he reviews briefly the institutions of this grade existing at the date of his writing. The system of Alabama is especially noteworthy. The movement for the establishment of central (county or township) high schools, in which agricultural education is to be a prominent feature, is very definitely pronounced, especially in the South and West, and the future of these institutions is full of promise.

In the elementary schools, agricultural education appears under a variety of aspects, which are briefly noted in the paper under consideration. They may be classed under the heads of nature study, school-garden work (including the ornamentation of school grounds and houses), lecture courses, etc.

EDUCATIONAL REFORM IN CHINA.

The fundamental transformation which the whole educational system of China is now undergoing furnishes a valuable study in the development of human institutions. We see here an elaborate and artificial mechanism for mental and moral training, which has come

down from a remote past, and witness the casting aside of that system in order to make room for an education that will meet the demands of practical life under modern conditions. The steps taken to accomplish this, and the results so far achieved, are described in a report made by Mr. E. T. Williams, Chinese secretary of the American legation at Peking, at the request of the Honorable W. W. Rockhill, American minister to China, which has been transmitted to this Bureau by the Department of State, and which forms a part of Chapter XII of this report. Mr. Williams, in the course of his narrative, enumerates the difficulties which have, of necessity, been encountered in putting the new system into operation, such as ignorance of officials, lack of teachers and of text-books, etc. Notwithstanding these, it has already "been inaugurated in every province of China proper, and bids fair to make rapid development in the near future." The need of teachers was met, in some measure, by the employment of students from the mission schools and some Europeans and Americans, but mainly by the appointment of numerous Japanese instructors. In the meantime the training of native teachers is proceeding, through the agency of normal schools, and through the education of Chinese students abroad, particularly in Japan. The school regulations now in force are summarized, and are seen to contemplate a complete organization of education from the kindergarten to the university, and to embrace various special schools and courses. It is stated that it will be many years before the whole plan is realized. The greatest progress has been made in the schools of the province of Chihli, of which Mr. Williams gives a more particular account.

EDUCATION IN ALASKA.

By act of Congress approved March 3, 1901, 50 per cent of all license moneys paid for business carried on outside of incorporated towns in Alaska was set aside to be expended for school purposes in unincorporated towns. A later act, approved January 27, 1905, devoted the entire license fund to the "construction and maintenance of roads, the establishment and maintenance of schools, and the care and support of insane persons in the district of Alaska, and for other purposes." Section VII of this act states that the schools specified are to be for "white children and children of mixed blood who lead a civilized life," and that the education of the Eskimos and Indians is to be provided for by an annual appropriation.

The immediate effect of this later legislation was to transfer 14 schools for "white children and children of mixed blood" from the control of the Bureau of Education to that of the governor of the Territory, and to decrease the fund for the support of native schools from $145,000, received from the license fund for the year 1904–5, to $50,000 granted by Congress for the year 1905–6.

This fund being insufficient to support the existing native schools, 9 of them were closed for the year 1905–6 and 14 others had their school terms shortened to keep within the limit of the appropriation. The balance of the license money paid into the Treasury to the credit of the school fund before the passage of the act of January 27, 1905, amounting to over $100,000, was set aside by the Secretary of the Interior for the erection of 26 much-needed school buildings.

During the fiscal year ending June 30, 1905, as appears from Chapter XIII, the Bureau of Education maintained in Alaska 51 public schools, with 62 teachers and an enrollment of 3,083 pupils.

Frequent suggestions appear in reports and correspondence of the teachers concerning the irregular attendance of the pupils and the need of a compulsory education law.

The reports by individual schools contained in Chapter XIII show marked and gratifying progress.

REINDEER IN ALASKA.

The progress of the reindeer industry in Alaska is shown in Chapter XIV.

The annual reports show that on June 30, 1905, there were 10,241 domestic reindeer, distributed among 15 stations.

Of the above 10,241 reindeer, 3,817 were owned by 78 Eskimo herders; 2,127 by 9 mission stations; 1,189 by 5 Laplanders, and 3,073 remain in the hands of the Government.

Of the above reindeer, 392 are broken to harness and 83 were in process of breaking June 30, 1905.

The report includes 10 tables of statistics. No. 1 shows the annual increase of the reindeer herds since 1892; No. 2, annual Congressional appropriations for introduction of reindeer into Alaska; No. 3, number and sex of reindeer by stations; No. 4, loans of reindeer, when, to whom, and how many, also when returnable to the Government; No. 5, ownership; No. 6, Eskimo apprentices and their holdings by stations; No. 7, location and number of deer owned by the Government; No. 8, trained sled deer; No. 9, distribution of reindeer owned by the missionary societies; No. 10, cost to the Government of the reindeer at the several mission stations.

During the year two important centers have been established, one at Tanana in the interior of Alaska, on the Yukon River, 901 miles from its mouth; and the other on the shores of Lake Iliamna, a few miles distant from Cook Inlet, in southern Alaska.

During December, 1904, and January, 1905, Dr. Carl O. Lind, supervisor of reindeer in Alaska, central division, with a party of 8 herders successfully drove 300 reindeer from Eaton station, near Norton Sound, 560 miles, to Bettles, in central Alaska. This herd

was later transferred to Tanana and loaned to the Episcopal Mission Society.

A second herd of 300 reindeer, under the supervision of Mr. Hedley E. Redmyer, was started from Bethel, on the Kuskokwim River, for Copper Center, 600 miles distant. Failing to find the passes through the mountain range which intervened between Bethel and Copper Center, Mr. Redmyer followed down the west base of the mountains to Lake Iliamna, where, with the approval of the Commissioner of Education, he established a new station.

During the year a loan of 100 head of reindeer was made to the Friends' Mission Society at Deering, on the north side of Seward Peninsula, and a former loan of 100 reindeer was returned to the Government by the Norwegian Evangelical Synod from its station at Teller.

In the spring of 1905, 2,978 living fawns were born in the herds.

During the year the trained reindeer were used to a limited extent in carrying the United States mail and in hauling freight for the miners.

The success of reindeer in Alaska has attracted the attention of Sir William MacGregor, governor-general of Newfoundland, and official inquiries have been received from the Hon. J. J. Woods, postmaster-general of Newfoundland, with regard to the practicability of securing reindeer for transportation purposes in northern Newfoundland and Labrador.

EDUCATION IN PORTO RICO.

The account of education in Porto Rico in Chapter XV was prepared by Samuel McCune Lindsay, Ph. D., professor of sociology in the University of Pennsylvania and commissioner of education in Porto Rico from 1902 to 1904. Doctor Lindsay gives a résumé of the social and educational condition of Porto Rico before the American occupation, including the illiteracy, school population and attendance, and a brief history of the efforts of the military authorities to organize a new system. He takes occasion to show that the hopeless view of the educational and moral situation of the population taken by General Davis has been contradicted by results. The apathy of the general population toward the schools remarked by General Davis has disappeared, and a general change of sentiment in that respect as well as an awakening of ambition for social improvement have been effected.

When the civil government replaced the military in 1900, there had been an attendance of 20,103 pupils out of an enrollment of 28,969, the number of children of school age being in 1899 over 322,000. Doctor Lindsay traces the growth of the educational system, chiefly of the primary school grade, from the advent of the civil government

to 1903–4, at which time the population was 1,012,775, the school population 393,786, the number of teachers 1,204 including 139 Americans, the total enrollment 61,168, and average daily attendance 41,798. The schools numbered 1,073. The language of instruction remains Spanish, although English is taught in every graded school. Besides this instruction in the English language as a subject of study, a number of schools have been established in the large towns in response to a demand of the people, in which all the subjects are taught in English. There are now 50 such schools which have been established gradually and only in consequence of a growing demand of the inhabitants, who thus manifest a desire to have their children know English.

Besides the primary schools, secondary and special schools have been established. They include besides high schools, industrial, rural, agricultural, and night schools, and a normal school.

On March 12, 1903, the legislature of Porto Rico passed a law establishing a university, having in mind the need of professional schools for the island. The act provides for an agricultural department of this university. The work of such a department is of supreme importance to the agricultural interests of the island.

Doctor Lindsay reviews the work of the Porto Rican and American teachers, the provision for Porto Rican students in the United States, the history of the insular legislation for education in Porto Rico, and concludes with the outlook for the future of education on the island judging from five years' experience.

EDUCATION IN THE PHILIPPINES.

The account of education in the Philippines in Chapter XVI is, as heretofore, mainly confined to the American school system, since no reports of the Spanish schools or of the ancient university of Santo Tomas at Manila have been received from educational authorities. The account consists of extracts from the report of the general superintendent of education of the Philippine Islands for 1904, illustrating the growth and tendency of the American system of education in the islands.

The annual expenditure of the insular government for the bureau of education increased from $233,411 in 1901 to $1,244,096 in 1904. The total amount expended since July, 1901, was $3,839,040, about two-thirds of which was expended for the salaries of American teachers and superintendents. The municipalities expended $508,151.96 in the same time. The total number of children between 6 and 14 years of age is reckoned at 1,200,000, and the intention is to give this number a primary course of education. Allowing three years as a period sufficient to give the bare essentials of such an education, the result can be accomplished by providing for 400,000 children at a time, and

this is the object aimed at by the insular bureau of education. The number of pupils actually enrolled in July, 1904, was 263,974. The country is organized into school districts, each in charge of an American supervisor. There are 700 American teachers for the 629 municipalities, and 3,195 Filipino teachers, these latter being paid not by the bureau of education but by the municipalities. These Filipino teachers have been industriously trained, at first by the American teachers individually, and afterwards in normal institutes. Primary instruction is now conducted entirely in English, and even the conversation in the class rooms is in English.

Prescribed and uniform courses of instruction are issued by the general superintendent. In the course of studies emphasis is laid upon "science studies," with a view to their practical use. The example of the Japanese is followed in this respect. The Filipinos are regarded as lacking in exactness, which a training in science is expected to correct.

Secondary or provincial schools have been organized in 35 provinces, the course in which is to correspond nearly with that of the American high school, except that the classics are practically eliminated and English literature is made to take their place. The normal school, the special schools of arts and trades, and the nautical school are briefly mentioned. The work of instructing the pagan tribes is energetically prosecuted.

A considerable number of secondary, private, and religious schools are reported in the census of the islands taken in 1903. They were attended by 14,011 students. There were 436 students at the university at the same time.

A matter of much interest is the plan to send Filipino students to the United States. This practice, which was probably suggested by the visit of Cuban teachers to this country and was inaugurated by the legislature of Porto Rico, was taken up by the Philippine Commission and authorized by the act of August 26, 1903. Under the provisions of this act 100 students were selected and sent to the United States at the expense of the insular government. They were distributed at various institutions throughout the country.

An account of the actual experiences of an American teacher, giving a vivid picture of the life of the people, with some views of their ethnology, is afforded by the notes of Robert B. Vaile, an American teacher in the schools of the Philippine Islands, which close the chapter.

CITY SCHOOL SYSTEMS.

The statistics of city schools are presented in Chapter XIX in 14 tables, 7 of which are devoted to summaries. The field of inquiry covered by these 14 tables embraces (1) the scholastic and financial

status of systems of schools in cities of 8,000 population and upward; (2) the same of schools in cities and villages of a population between 4,000 and 8,000; (3) statistics of evening schools in cities of 8,000 and upward; (4) statistics of kindergartens in cities and villages of 4,000 population and upward.

In the following table the leading items are compared with those of the previous year. An examination of this table shows two significant facts which confirm well-known tendencies. The first of these is that school expenditures have increased at a much greater ratio than enrollment; and the second, that expenditure for tuition (salaries of teachers and supervising officers) has increased at a ratio exceeding that of increase in number of officers and teachers. The unmistakable trend is toward increased salaries for teachers. Fifty-six of the 175 cities of a population of 25,000 and upward whose schedules were reported in the report of the committee on salaries, tenure, and pensions (N. E. A., 1905) have amended their schedules since the collection of material for that report. The details of these changes are given in the chapter on current topics.

Summary of statistics of cities containing over 8,000 inhabitants, showing increase from previous year.

	1903–4.	1904–5.	Increase.	Increase per cent.
Number of city school systems	588	594	6	1.02
Enrollment	4,374,463	4,506,678	132,215	3.02
Aggregate number of days attendance	630,662,688	651,970,275	21,307,587	3.38
Average daily attendance	3,354,806	3,434,323	79,517	2.07
Average length of the school term in days	187.9	189.8	1.9	1.00
Enrollment in private and parochial schools	1,006,552	1,012,380	5,828	.58
Male supervising officers	2,799	2,811	12	.42
Female supervising officers	2,820	2,918	98	3.04
Whole number of supervising officers	5,619	5,729	110	1.96
Number of male teachers	7,289	7,769	480	6.59
Number of female teachers	89,335	92,417	3,082	3.45
Whole number of teachers	96,624	100,186	3,562	3.69
Number of buildings	10,069	10,179	110	1.10
Number of seats	4,151,938	4,314,319	162,381	3.91
Value of school property	$410,326,526	$424,859,805	$14,533,279	3.54
Expenditure for tuition	$74,332,482	$78,328,420	$3,995,938	5.37
Total expenditure	$129,836,203	$139,417,318	$9,581,115	7.37

UNIVERSITIES, COLLEGES, AND TECHNOLOGICAL SCHOOLS.

Chapter XX exhibits the statistics of 619 institutions reporting to this Bureau in 1905. There were 453 universities and colleges classed as colleges of liberal arts, 322 being open to both men and women and 131 to men only. These institutions grant the B. A. as well as other first degrees and are known as the "B. A. colleges." There were 44 schools of technology, known as the "B. S. colleges." They do not grant the B. A. degree. Of these, 22 are open to both men and women. There were 122 institutions which admit women only. For convenience in the classification of statistics these are subdivided, according to the past usage of this Bureau, into Division A and Division B.

In all departments of the 619 institutions there were 22,613 professors and instructors, 18,221 men and 4,392 women. The number in undergraduate departments was 14,251, the number of men being 11,038 and women 3,213. These numbers included 386 men and 1,530 women in Division B of colleges for women who were not classified as to departments.

Not including the 107 colleges for women, Division B, the remaining 512 institutions reported 126,404 students in the undergraduate and resident graduate departments. This shows the unusually large increase of 8,375 over the preceding year. The following table shows the number of students each year since 1890:

Number of undergraduate and resident graduate students in universities, colleges, and schools of technology from 1889–90 to 1904–5.

Year.	Universities and colleges for men and for both sexes.		Colleges for women. Division A	Schools of technology.		Total number.	
	Men	Women.	Women.	Men.	Women.	Men.	Women.
1889-90	38,056	8,075	1,979	6,870	707	44,026	10,761
1890-91	40,089	9,439	2,285	6,131	481	46,220	12,185
1891-92	45,032	10,390	2,636	6,131	481	51,163	13,507
1892-93	46,689	11,489	3,198	8,616	843	55,305	15,530
1893-94	50,297	13,144	3,578	9,517	1,376	59,814	18,098
1894-95	52,586	14,208	3,667	9,467	1,106	62,053	19,071
1895-96	56,556	16,746	3,910	8,587	1,065	65,143	21,721
1896-97	55,755	16,536	3,913	8,907	1,094	64,662	21,543
1897-98	58,407	17,765	4,416	8,611	1,289	67,018	23,470
1898-99	58,467	18,948	4,593	9,038	1,339	67,505	24,880
1899-1900	61,812	20,452	4,872	10,347	1,440	72,159	26,764
1900-1901	65,069	21,468	5,260	10,403	1,151	75,472	27,879
1901-2	66,325	22,307	5,549	11,806	1,202	78,133	29,218
1902-3	69,178	24,863	5,749	13,216	1,124	82,394	31,736
1903-4	71,817	24,413	6,341	14,189	1,289	86,006	32,023
1904-5	77,250	26,739	6,305	14,911	1,199	92,161	34,243

In addition to the number of students enrolled in 1905, as shown above, there were 11,319 enrolled in the 107 colleges for women, Division B.

Resident graduate students to the number of 6,935 were reported by 229 different institutions, 2,004 of such students being women. The 619 institutions granted degrees to 13,371 men and 6,091 women. The B. A. degree was conferred on 5,650 men and 3,785 women; the B. S. degree on 3,576 men and 554 women; the Ph. B. degree on 700 men and 361 women, and the B. L. degree on 103 men and 562 women. The M. A. degree was conferred on 1,207 men and 341 women, and that of Ph. D. on 336 men and 25 women. More than 1,000 men received engineering degrees. It may be noted that the Ph. D. degree was received as an honorary degree by 12 persons.

The 619 universities and colleges and schools of technology owned property in 1905 to the value of $514,840,412, a gain of nearly $50,000,000 over the valuation of the preceding year. The above aggregate includes endowment funds to the amount of $234,791,239, as compared with $166,193,529 in 1900, or a gain of over 41 per

cent in five years. The institutions had an aggregate income of $41,775,101, an increase of $1,445,908 over that for the preceding year. Of the entire amount, 36.9 per cent was derived from tuition and other fees, 23.6 per cent from endowment funds, 23.6 per cent from State appropriations, 6.9 per cent from Federal appropriations, and 9 per cent from miscellaneous sources. Benefactions for the year, amounting to $16,678,952, were received by 330 institutions.

AGRICULTURAL AND MECHANICAL COLLEGES.

These institutions, which form the subject of Chapter XXI, were established under the land-grant act of July 2, 1862. The income-producing funds derived from the sale of the lands granted under that act now amount to $12,045,629, only the income of which may be expended. In addition, each State and Territory now receives annually the sum of $25,000 from the General Government for the benefit of these institutions, under an act of Congress approved August 30, 1890. The total amount that has been paid under that act up to and including the installment for the year ending June 30, 1905, is $16,402,000.

The total income of the institutions amounted to $11,659,955, of which amount nearly 50 per cent was furnished by the several States and Territories, less than 20 per cent by the Federal Government, and the remainder from endowments from other than Federal and State sources, and from tuition fees and miscellaneous sources.

The total number of students in attendance at the institutions was 54,974, of which number 6,381 were reported by the institutions for colored students. The number of students in technical courses is increasing very rapidly. The short courses in agricultural subjects, which were started only a comparatively short time ago, enrolled students as follows: Agriculture, 4,175; horticulture, 173; dairying, 597.

The chapter contains a summary of all legislation affecting these institutions enacted at the sessions of 1905 of the several State legislatures. Among some of the most important of these enactments may be mentioned the provision by the State of Wisconsin for an annual tax levy of two-sevenths of a mill on each dollar of the assessed valuation of the taxable property of the State for the University of Wisconsin, and the provision by Wyoming for an annual tax levy of three-eighths of a mill for the University of Wyoming. Many of the States are making generous provision for buildings and maintenance, especially for instruction and experimentation in agricultural subjects.

During the past few years considerable progress has been made in the establishment of schools of agriculture and the mechanic arts of secondary grade and in the introduction of agricultural and related subjects into high school courses. Alabama has one agricultural

classes of institutions offering professional instruction to teachers and the number of students under such instruction in institutions of each class for the four years 1901–1905:

Students in training courses for teachers reported for four years.

Classes of institutions.	1901–2.		1902–3.		1903–4.		1904–5.	
	Institutions.	Students.	Institutions.	Students.	Institutions.	Students.	Institutions.	Students.
Public normal schools	173	49,403	177	49,175	178	51,035	179	54,521
Private normal schools	109	15,055	109	14,939	91	11,992	89	10,779
Public universities and colleges	39	3,003	37	2,907	34	2,765	38	3,028
Private universities and colleges	195	7,687	204	8,340	196	7,396	213	8,649
Public high schools	368	10,483	458	6,965	440	7,468	390	10,476
Private high schools	357	7,802	279	5,887	272	5,963	296	6,177
Total	1,241	94,133	1,264	88,003	1,220	87,239	1,205	93,640
In all public institutions	580	62,889	672	58,837	661	61,888	607	68,025
In all private institutions	661	31,244	592	29,166	559	25,351	598	25,605

The chapter gives in detail the statistics of 179 public normal schools and 89 private normal schools reporting to this Bureau for the year 1904–5. These schools had 10,360 graduates for the year, or 15.86 per cent of the total enrollment of 65,300. If the 28,340 students in training courses for teachers in other institutions had a proportionate number of graduates, the total number of such graduates for the year must have been about 14,855, a number inadequate to recruit the ranks of the great army of 580,000 teachers of the United States. The following table compares the statistics of public and private normal schools for 1890 and 1905:

	1889–90.				1904–5.			
	Schools.	Instructors.	Normal students.	Normal graduates.	Schools.	Instructors.	Normal students.	Normal graduates.
Public normal schools	135	1,182	26,217	4,413	179	2,957	54,521	9,274
Private normal schools	43	274	7,897	824	89	694	10,779	1,086
Total	178	1,456	34,814	5,237	268	3,651	65,300	10,360

The growth of public normal schools since 1890 is indicated by the following table, which summarizes the public appropriations for their support and for improvements each year for the past sixteen years:

Public appropriations to public normal schools for sixteen years.

Year.	For support.	For buildings	Year.	For support	For buildings.
1889–90	$1,312,419	$200,553	1897–98	$2,506,132	$417,880
1890–91	1,285,700	409,911	1898–99	2,510,934	560,896
1891–92	1,367,082	394,035	1899–1900	2,709,003	718,507
1892–93	1,452,914	816,826	1900–1	3,008,485	709,217
1893–94	1,996,271	1,583,399	1901–2	3,228,000	906,301
1894–95	1,917,375	1,003,933	1902–3	3,583,109	1,268,742
1895–96	2,187,875	1,124,334	1903–4	3,927,808	915,443
1896–97	2,426,185	743,333	1904–5	4,131,006	1,084,789

SECONDARY SCHOOLS.

The enrollment of students of high school grade for the scholastic year ending June, 1905, as appears from Chapter XXIV, reached 876,050, or more than 1 per cent of the population of the United States. This was an increase of 53,815 over the preceding year. Public high schools and the preparatory departments of State colleges and the nonprofessional departments of public normal schools had 695,989 of the secondary students, while private high schools and academies and the preparatory departments of private colleges, private manual training schools, and the nonprofessional departments of private normal schools had the remaining 180,061 secondary students. The numbers of students thus distributed for the past two years are shown in the following table:

Secondary students in institutions of all classes.

Institutions.	1903–4			1904–5		
	Male	Female.	Total	Male	Female.	Total.
Public high schools	266,039	369,709	635,808	268,391	301,311	679,702
Public normal schools	2,150	3,243	5,393	1,863	2,801	4,664
Public universities and colleges	6,835	2,768	11,603	8,967	2,656	11,623
Private high schools	51,599	51,808	103,407	51,778	55,429	107,207
Private normal schools	4,198	3,618	7,816	6,607	4,653	11,260
Private universities and colleges	30,073	14,555	44,628	32,043	14,792	46,835
Private colleges for women	..	4,800	4,800	..	5,027	5,027
Manual training schools	5,641	3,139	8,780	5,651	3,481	9,132
Total	368,535	453,700	822,235	395,300	480,750	876,050

The number of secondary students enrolled in the classes of institutions named above, for each year since 1890, are given in the table which follows, together with percentages showing the ratio of such enrollment to the total population of the country.

Secondary students and per cent of population.

Year.	In public institutions.		In private institutions.		In both classes.	
	Secondary students.	Per cent of population.	Secondary students.	Per cent of population	Secondary students.	Per cent of population.
1889–90	221,522	0.36	145,481	0.23	367,003	0.59
1890–91	222,868	.35	147,567	.23	370,435	.58
1891–92	247,660	.38	154,429	.24	402,089	.62
1892–93	256,628	.39	153,792	.23	410,420	.62
1893–94	302,006	.45	178,352	.26	480,358	.71
1894–95	361,370	.53	178,342	.26	539,712	.79
1895–96	392,729	.56	166,274	.23	559,003	.79
1896–97	420,459	.59	164,445	.23	584,904	.82
1897–98	459,813	.63	166,302	.23	626,115	.86
1898–99	488,549	.66	166,678	.23	655,227	.89
1899–1900	530,425	.70	188,816	.25	719,241	.95
1900–1901	558,740	.72	177,260	.23	736,000	.95
1901–2	586,124	.72	168,636	.22	754,760	.94
1902–3	608,412	.76	168,223	.21	776,635	.97
1903–4	652,804	.80	169,431	.21	822,235	1.01
1904–5	695,989	.84	180,061	.22	876,050	1.06

The whole number of secondary students is given in the following table by geographical divisions and compared with the enrollment for the preceding year:

Students receiving secondary instruction in public and private high schools and academies and in preparatory departments of colleges and other institutions.

	1903–4.			1904–5.			Per cent of increase.		
	Public.	Private.	Total.	Public.	Private.	Total.	Public.	Private.	Total.
United States	652,804	169,431	822,235	695,989	180,061	876,050	6.62	6.27	6.54
North Atlantic Division	211,304	51,477	262,781	226,834	52,702	279,536	7.33	2.38	6.38
South Atlantic Division	36,039	23,970	60,009	38,140	25,403	63,543	5.83	5.98	5.89
South Central Division	52,152	29,731	81,883	53,545	30,897	84,442	2.67	3.92	3.13
North Central Division	304,439	51,751	356,190	323,979	58,262	382,241	6.42	12.58	7.31
Western Division	48,870	12,502	61,372	53,491	12,797	66,288	9.46	2.36	8.01

Nearly the whole of the chapter on secondary schools is devoted to the statistics of public high schools and private high schools, academies, and seminaries. There were 7,576 public high schools, with 28,461 teachers of secondary students, and an enrollment of 679,702 secondary students, and 1,627 private high schools, with 9,850 teachers of secondary students, and an enrollment of 107,207 secondary students.

The following table exhibits the growth since 1890 of these public and private high schools, that is, secondary schools proper. In addition to the number of schools, the number of secondary students in schools of that class and the number of teachers of such students are given. The exclusion from this table of students receiving secondary instruction in colleges and other institutions outside of the regular secondary schools accounts for the number of secondary students therein given being less than that given in the preceding tables.

Public and private high schools since 1889–90.

Year reported.	Public.			Private.			Total.		
	Schools.	Teachers.	Students.	Schools.	Teachers.	Students.	Schools.	Teachers.	Students.
1889–90	2,526	9,120	202,963	1,632	7,209	94,931	4,158	16,329	297,894
1890–91	2,771	8,270	211,596	1,714	6,231	98,400	4,485	14,501	309,996
1891–92	3,035	9,564	239,556	1,550	7,093	100,730	4,585	16,657	340,286
1892–93	3,218	10,141	254,023	1,575	7,199	102,375	4,793	17,340	356,398
1893–94	3,964	12,130	289,274	1,982	8,009	118,645	5,946	20,129	407,919
1894–95	4,712	14,122	350,099	2,180	8,559	118,347	6,892	22,681	468,446
1895–96	4,974	15,709	380,493	2,106	8,752	100,654	7,080	24,452	487,147
1896–97	5,109	16,809	409,433	2,100	9,574	107,633	7,209	26,383	517,066
1897–98	5,315	17,941	449,600	1,990	9,457	105,225	7,305	27,398	554,825
1898–99	5,495	18,718	476,227	1,957	9,410	103,838	7,452	28,128	580,065
1899–1900	6,005	20,372	519,251	1,978	10,117	110,797	7,983	30,489	630,048
1900–1901	6,318	21,778	541,730	1,892	9,775	108,221	8,210	31,553	649,951
1901–2	6,292	22,415	550,611	1,835	9,903	104,690	8,127	32,318	655,301
1902–3	6,800	24,349	592,213	1,690	9,446	101,847	8,490	33,795	694,060
1903–4	7,230	26,760	635,808	1,600	9,500	103,407	8,836	36,326	739,215
1904–5	7,576	28,461	679,702	1,627	9,850	107,207	9,203	38,311	786,909

From the above table is derived the following, which shows the relative number of public and private high schools, teachers, and students in sixteen years:

Relative progress of public and private high schools in sixteen years.

Year reported.	Per cent of number of schools.		Per cent of number of teachers.		Per cent of number of students.	
	Public.	Private.	Public.	Private.	Public.	Private.
1889–90	60.75	39.25	55.85	44.15	68.13	31.87
1890–91	61.78	38.22	57.03	42.97	68.26	31.74
1891–92	66.19	33.81	57.42	42.58	70.40	29.60
1892–93	66.23	33.77	60.25	39.75	70.78	29.22
1893–94	66.67	33.33	60.21	39.79	70.91	29.09
1894–95	68.37	31.63	62.26	37.74	74.74	25.26
1895–96	70.25	29.75	64.21	35.79	78.11	21.89
1896–97	70.87	29.13	63.71	36.29	79.18	20.82
1897–98	72.76	27.24	65.72	34.28	81.03	18.97
1898–99	73.74	26.26	66.55	33.45	82.10	17.90
1899–1900	75.22	24.78	66.82	33.18	82.41	17.59
1900–1901	76.95	23.05	69.02	30.98	83.35	16.65
1901–2	77.42	22.58	69.36	30.64	84.02	15.98
1902–3	80.04	19.96	72.05	27.95	85.33	14.67
1903–4	81.82	18.18	73.67	26.33	86.01	13.99
1904–5	82.32	17.68	74.29	25.71	86.38	13.62

MANUAL AND INDUSTRIAL TRAINING.

Chapter XXV shows that in more than two-thirds of the cities of the United States having 4,000 population and over manual training is taught in some of the grades of the public schools. There are 1,212 school systems in cities of the size named, and in 420 of these manual training forms part of the course of instruction. In 1890 only 37 city school systems included manual training in the course of instruction. In 1894 the number had increased to 95, in 1900 to 169, in 1901 to 232, in 1902 to 270, in 1903 to 322, and in 1904 to 411. Eleven years ago this Bureau received reports from 15 manual training schools. These schools had 3,362 students in manual training—2,403 boys and 959 girls—all of secondary or high school grade. The next year, with the same number of schools reporting, there were 4,892 students, of whom 3,621 were boys and 1,271 girls. In 1897 the number of schools had increased to 40, with 13,890 students—9,224 boys and 4,666 girls. Industrial training schools, or schools in which certain trades were taught, were included with the manual training schools proper, and since 1897 the statistics given are for "manual and industrial training." In 1898 there were 58 manual and industrial training schools, with 18,977 students—12,975 boys and 6,002 girls. All of these were reported as students of secondary or high school grade. In 1900 there were 69 schools, with 24,716 students—15,819 boys and 8,897 girls. In 1904 there were 98 schools, with 36,680 students—20,701 boys and 15,979 girls—and in 1905 the number had increased to 106 schools, with 43,197 students—25,571 boys and 17,626 girls.

BUSINESS SCHOOLS.

The statistics of business schools are given in Chapter XXVI. This Bureau received reports from 529 commercial and business schools for the year 1904–5. These schools had 146,086 students, 84,621 men and 61,465 women. There were also 10,377 students in business courses in colleges and universities, 2,632 in such courses in normal schools, 13,394 in private high schools and academies, and 90,309 in public high schools, making a grand total of 262,798 students, 144,905 men and 117,893 women, in commercial or business courses in all classes of institutions.

SCHOOLS FOR NURSES.

In Chapter XXVII the number of nurse-training schools is reported as 862, or 138 more than were reported in the previous year. The number of persons receiving instruction in nurse training was 19,824, an increase of 2,111 over the number of the year before. These figures indicated a remarkable advance in training of this type. In addition to those reported above, there were 456 pupils in special hospitals taking short courses of instruction in particular subjects, making altogether 20,280 nurse pupils.

In the hospitals with nurse-training schools (exclusive of those for the insane) there were accommodations for 72,637 patients. The value of the hospitals reported aggregated over $87,000,000, and, as many of them did not report this item, it is probable a full valuation would exceed $100,000,000. Nine States have established boards of examiners for the registration of nurses, namely, North Carolina (March 3, 1903), New Jersey (April 7, 1903), New York (April 24, 1903), Virginia (May 1, 1903), Maryland (March 25, 1904), Indiana (February 27, 1905), California (March 21, 1905), Colorado (April 12, 1905), and Connecticut (June 6, 1905).

SCHOOLS FOR THE COLORED RACE.

Since 1870 the Southern States have expended the aggregate of $818,242,553 for public schools (Chapter XXVIII). It is estimated that about $149,000,000 of this sum has been expended to support common schools for the colored race. For the year 1904–5 the sum of $46,401,832 was expended in the South for the maintenance of the common schools for both races, about 20 per cent of this sum being for the support of the schools for negroes. The enrollment in the common schools for the whites was 4,564,798, while the negro schools had an enrollment of 1,602,194, the latter number including 7,250 secondary students in 146 high schools. Statistics of the 128 private institutions devoted to the secondary and higher education of the colored race will be found in the same chapter.

REFORM SCHOOLS.

There were 99 reformatories and other institutions known as State industrial schools for juveniles reporting in 1905 (Chapter XXIX). These schools had 38,006 inmates, 36,580 of these being taught the common school branches for some part of the year, and 30,378 having some industrial training. These schools employed 771 teachers, with 2,013 assistants caring for the inmates.

SCHOOLS FOR THE DEFECTIVE CLASSES.

Chapter XXX includes the statistics of schools for the blind, the deaf, and the feeble minded. There were 40 schools for the blind, employing 505 teachers and having an aggregate enrollment of 4,441 pupils—2,401 boys and 2,040 girls. There were 136 schools for the deaf, 56 State institutions, 64 public day schools, and 16 private schools, with an aggregate enrollment of 11,952 pupils—6,496 boys and 5,456 girls. There were 25 State schools and 15 private schools for the feeble minded, with a total enrollment of 16,240 pupils—8,683 boys and 7,557 girls. In all the above-named institutions greater prominence is given year by year to manual and industrial training.

RECOMMENDATIONS.

It appears from the foregoing statements that public education in the United States continued during the year 1904–5 to make substantial progress, as in the years immediately preceding. It appears also that a work of the greatest magnitude remains to be done in the maintenance of a rate of educational progress which shall not only equal the rate of national development in general, but shall in many particulars proceed even more rapidly, in order to prepare in advance for future demands which can already be foreseen.

In accordance with the provisions of the act establishing this Office it devolves upon the Commissioner of Education to present annually to Congress a statement not only of facts but of recommendations which will in his judgment subserve the purpose for which the Office was established, namely, that of aiding the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promoting the cause of education throughout the country. The first recommendation which I beg to submit in view of this provision is that greater effort be put forth to improve the school attendance of this country, which is still in an extremely unsatisfactory condition. To this end it is necessary that a variety of means and agencies be organized in effective cooperation. Among such means and agencies may be mentioned, first, compulsory-attendance laws in the States and the faithful execution of such laws, with

the help, wherever necessary, of truant officers; secondly, special schools for truant and incorrigible children; thirdly, juvenile courts in the cities; fourthly, laws prohibiting the employment of children as wage earners up to an age when such employment will no longer be physically injurious, and limiting such employment beyond that age to give full opportunity for the acquirement of at least a well-rounded elementary education, and provision by the employment of inspectors and otherwise for rendering such laws fully operative; fifthly, provision for the transportation of school children in country districts, particularly in connection with consolidated schools; sixthly, provision for good roads leading to district and consolidated schools; seventhly, provision for hygienic conditions in schools and the cooperation of boards of public health in promoting and preserving the health of school children; eighthly, such differentiation and enrichment of instruction in the higher elementary and secondary grades, particularly in the direction of thorough commercial and technical courses, as will enable the schools to keep a firmer hold upon that considerable class of pupils, particularly boys, who are now drawn away from school by opportunities for profitable employment.

The second recommendation which I would respectfully present is concerned with the fact, which every year makes more obvious, that our public education has passed into an international stage in its development. The approach of the second International Peace Conference at The Hague has turned public attention to the many-sided modern movement toward a peaceful adjustment of international relations. Governments, in striving to maintain an honorable peace, require the reenforcement of popular sentiment, and it is of the utmost importance that such public sentiment should steadily demand a peace which makes for righteousness, and no other peace than that which will make for righteousness. A public sentiment calling for such peace will be stable only when it rests upon an appreciative understanding of other nations. In this there is a great work for education the world over, that it help the nations understand one another. Whatever the schools may do to this great end will count for real education. Can any form of learning, in fact, be more liberalizing, more expanding, more tonic, than the insight gained through knowledge of other peoples, our contemporaries, who with us are the makers of modern history?

Already a considerable movement is under way looking to the annual commemoration in the schools of the United States of the opening of the first Hague conference, which occurred on the 18th day of May, 1899. Such a celebration seems eminently desirable, by way of laying due emphasis in the schools upon the vital relations of modern peoples one to another. I would accordingly recommend that, so far as consistent with State and local conditions, the 18th

day of May in each year be designated as a day of special observance in the schools. It is particularly desirable that in the celebration of this anniversary day, and in the instruction of the schools throughout the year, the effort be made to promote an insight into the true aims and aspirations of our own nation and of the other nations with whom we are to work together in the making of a higher world civilization. This view calls for a more thorough teaching of geography and history in the elementary schools, that the first notions formed by the children in those schools, of our relations with other lands and peoples, may be true and temperate; it calls for a better teaching of modern languages and literatures in our secondary schools and colleges; and in the more highly specialized studies of commercial and technical schools it calls for more thorough and accurate instruction in all subjects having to do with the relations of our home land with foreign lands.

This is not a foreign view of American education, but rather an American view; for it is already clear that American institutions can reach their full development only by finding their rightful place in the current of the world's history, and that only by so doing can they become fully American.

All of which is respectfully submitted.

ELMER ELLSWORTH BROWN,
Commissioner.

The honorable the SECRETARY OF THE INTERIOR.

UNIV. OF CALIFORNIA

CHAPTER I.

THE REPORTS OF THE MOSELY EDUCATIONAL COMMISSION.[a]

By W. T. Harris.

Mr. Mosely states in the preface to his collection of reports that it was the success of engineers from the United States whom he had known in South Africa that turned his attention this way to see "what sort of country it was that was responsible for sending so many level-headed men to the Cape." He mentions Gardner Williams, a California engineer, who arrived in South Africa and took the management of the De Beers Company. "Gardner Williams imported Louis Seymour, and these were followed by many other American engineers, including Perkins, Jennings, and Hammond.

"So far as I was able to ascertain, the form of education given in the United States is responsible for much of its success, and I returned home determined, if possible, to get together a party of experts to visit the country and test the soundness of my conclusions."

A splendid set of men were finally enlisted, representing British education more or less completely in its entirety, forming a noteworthy commission organized "to investigate the relations between education and commercial and industrial efficiency;" or, phrased differently, "to find out the educational causes and conditions which have contributed to the rapid industrial development of the United States."

The reports fill a book of 400 pages octavo, and form a mass of acute observations, critical suggestions, appreciative explanations, candid statements of disagreement—all in admirable tone.

The advantage to Americans in this book is to be found chiefly in the fact that the contributions it contains are written by people who have a different national point of view from our own. They teach how to see in what we are doing a different result, or series of results, from those we have been in the habit of looking for.

Each essay deserves the most careful attention from the American reader. And the whole book—it deserves to have a special lectureship devoted to it in each one of our normal schools.

No magazine paper of ordinary limits can deal adequately with the matters contained in any one of a dozen of the best individual reports.

I must content myself with quoting passages here and there touching live questions, and at times commenting on the difference between the British and the American points of view. There are the manual-training question, the public high schools, the schools of commerce, natural science, the study of English, immigration, the increase of women teachers, and the great question of coeducation.

On these last two topics Americans will read according to their convictions with some warmth the divergent views which members of the commission put forward.

We must all feel that the occasion put forward as the ground for the appointment of the commission is in itself a delicate but overwhelming piece of national flattery—in a good sense of the word "flattery." For it assumes as the most real of facts an achieved greatness of the United States in industry and commerce, and seeks to find its source in a self-conscious and reasonable preparation for it on the part of our people in the education of the rising generation.

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[a] Reprinted by permission from the Educational Review, New York, September, 1904.

We read with some incredulity the words in which the members of the commission speak of our achievements in manufactures and commerce, and we gladly return again and again to what is said in praise of our national enthusiasm for the schooling of our people.

The reports of the Mosely Educational Commission to the United States of America[a] have been compiled for publication in alphabetical order. They consist of 27 individual reports, with a preliminary statement by Mr. Mosely, and a brief summary of the several individual reports by Prof. Henry E. Armstrong, himself the author of one of the most important individual reports.

There is manifest throughout the series a spirit of generosity and a desire to see all the good that is possible in the management of American education. The members of the commission looked carefully to find in the American education system an explanation of the great national influence of America in industry and commerce.

We have been in the habit of thinking that our institutions for the development of directive power in the conquest of nature have been of a high order for many years, and that our institutes of technology have had a large influence upon American industries that relate to transportation and intercommunication and motive power, as will be seen from the nature of the studies undertaken in them, and equally well seen if one traces out one by one the life history and influence of the graduates of these institutions.

Mr. Shepheard, chairman of the technical education board of the London County Council, believes that "it will be found that every member of the Mosely Commission will have come back with the same opinion that I have, namely, that England is at a distinct disadvantage when the business aspect of education is considered. Where we turn out 10 highly qualified men they turn out hundreds, and their trade reaps corresponding advantage. Undoubtedly we have in England an advantage which the Americans do not possess in our widely scattered polytechnics and smaller technical institutions. But I am now speaking of the higher grade of technical work (American 'institutes of technology'), and in this respect we, as far as I can see, are at present a long way behind the States."

In American education it is well known that new experiments get advertised extensively, and cities that are proposing to establish an experimental school on a new method give it a place in their educational reports that, without any intent to deceive, would carry the conviction to a stranger in a foreign land who reads our reports that the new experiment here is something well established and exercising an immense influence, not only upon our schools, but upon our industries. On this account it had to be explained again and again to the gentlemen of the Mosely Commission by our teachers and industrial directors that our excellent manual-training schools and higher institutions for industry and art (such as the Drexel Institute, the Pratt Institute, and other institutions of similar high grade) had not been long enough in existence to make themselves felt in American industry to such an extent as to explain the prodigious increase of our exports and imports.

We in the United States are well aware that our manual-training schools, now numerous and still rapidly increasing, are of recent establishment. Their development in ten years is shown in the following table:

Year.	Schools.	Males.	Females.	Total students.
1894	15	2,403	959	3,362
1897	40	9,224	4,666	13,890
1898	48	12,975	6,002	18,977
1899	66	13,903	6,798	20,701
1900	69	15,819	8,897	24,716
1901	78	18,928	10,058	28,986
1902	86	18,771	10,736	29,507
1903	95	20,170	12,892	33,062

[a] Cooperative Printing Society (Limited): London, 1904.

The following table gives the number of cities of 8,000 population and over in which manual training was given in the years indicated (it includes also the cities containing the schools of the above table):

State or Territory.	1890.	1894.	1896.	1898.	1900.	1901.	1902.
United States	37	95	121	146	169	232	270
North Atlantic Division	23	52	72	80	94	112	125
South Atlantic Division	3	3	6	5	10	16	22
South Central Division	1	2	2	5	3	12	12
North Central Division	10	30	31	45	48	73	89
Western Division		8	10	11	14	19	22

Ten years is too short a period to reap the results of a system of industrial schools, no matter how well equipped and how efficiently managed.

There does not remain any question in the mind of an American familiar with the equipment and management of such schools already founded, and of the others about to be founded in the several centers of population, that our industry is to be greatly affected by our industrial schools. For it is scarcely a matter of dispute that the school is far more potent in the preparation of the skilled laborer than mere apprenticeship. The school discovers and teaches the highest results of skill, and it hastens forward the pupil without tedious delay into the possession of the most approved methods of manipulation; it brings together the devices invented along the lines of the several industries and along the lines of the most efficient methods of managing the details of commerce, foreign and domestic, and places these before the learner with painstaking explanations of their rationale.

Apprenticeship, on the other hand, depends for its efficiency directly upon the intelligence and generosity of the firm or corporation that employs the apprentice. One-half or two-thirds of the apprentices (and some would say nine-tenths of the apprentices) employed in the United States and elsewhere are kept back for years in places of drudgery, and their interests neglected for the selfish profit of the business manager, or for the comfort and convenience of the older workmen who have completed their apprenticeship. The average American boy escapes from his apprenticeship before he has really learned the higher forms of skill in his trade. The boy has patience sufficient to learn his subject according to the methods of the school, but he can not submit to the humbling process of the old-fashioned seven years' apprenticeship which involves three to five years of drudgery.

Many of the reports by the members of the Mosely Commission indicate disappointment at what they see in our industrial schools, and at the evidently defective systems of apprenticeship in the United States—generously praising noteworthy exceptions—but it does not appear to me that they have noticed sufficiently that the American boy is fitted by the general course of the common school for a successful directorship of machinery. The graduate of the elementary school is well fitted by alertness and versatility to direct or "tend" the machine in the textile manufactory, or in the machine shop, or in agriculture. If we remember that the manual-training school does not cultivate alertness, versatility, and the power of attention any more than, if quite as much as, the ordinary studies of the schools in arithmetic, algebra, geometry, "natural philosophy" or physics, not to mention grammar and other language studies, we shall not be surprised that in our country, where industrial machinery of every kind is almost universally used, the American laborer is found to be possessed of noteworthy skill and ability to turn out a large amount of product, and that he is able to adjust himself to new situations, for the common-school curricula give exactly the best training for this.

The use of the printed page as an instrument to acquire the result of other people's experience is carried so far in America as to make it the well-known characteristic

of American school methods. The youth at school is taught to be an investigator by means of the book. His chief effort is to master the information extant on the subject; it is only his secondary effort to verify the information which he finds in books.

This is both the strength and the weakness of the chosen method of American pedagogy. Its strength is its ability to get hold of the experience of others—make all other human endeavor vicarious—make it tributary to the pupil's own endeavor. Its weakness is that it accumulates more experience of others than it really assimilates, and is more or less pedantic and superficial—superficial because not made the pupil's own by verification. In fact, its superficiality is a saving quality, for it is better for the pupil to know, in myriads of cases, that there is a valuable experience recorded in the technical journal or in the encyclopedia than it is to master it in all its details on first acquaintance. He would be overwhelmed by the effort at exhausting the subject by a thorough study in the case of the first thing that he encountered, and would arrest his development then and there.

But when he comes later in his actual industry to encounter difficulties in his work he knows where to get the results of other people's experiments and all the details of their patient struggles. He uses these thankfully and makes all the more a valuable contribution to science or industry because he has first availed himself of human experience stored up for him by means of the printed page.

His superficiality is therefore only seeming—he is holding his own poise in the presence of the mass of learning available in books. If he gave himself up to verbatim et literatim thoroughness, he would stop at the vestibule for the sixteen years of his school life. He would become arrested in his spiritual development and would lose his power of initiative. But the student who is interested in the net results—interested in the whole province of learning rather than in its minute details—and who tastes rather than crams all into his stomach at once, continues to grow in self-activity provided he devotes the same amount of time to the subject. He postpones his specializing till it is necessary.

I have been particularly struck with a remark of Mr. Mosely himself in regard to the superiority of initiative which Americans exhibited in South Africa.

> It was suggested by one of the speakers [at a dinner] that the early pioneer spirit, which had to fight the red Indian and subjugate the country, might be responsible for the success of the United States apart from education. From this expression of opinion I beg to differ. During the many years I spent in South Africa I saw the same class of men [men from England] visit its shores, and yet comparatively little progress was made, not because the country had no resources, but because education there had not reached the same high plane that it has in the United States.

Here the reference is unmistakably to a cause to be found in the course of study in the elementary schools and the high schools, which turn out pupils who have the advantage of a general survey of the fields of learning, and not to pupils who are special experts in mining, commerce, or the industries.

It is the general education which gives the maximum power of initiative in the presence of a new situation. It is our common schooling, elementary and secondary, in numerous public high schools and private academies, added to our national spirit of enterprise, that trains the youth with us to take in the industrial situation and the opportunity it offers at a glance. Of course, we do not get any noteworthy advantage without incident disadvantages, and while students are making the effort to take in the whole situation they are necessarily engaged in suppressing or inhibiting such attention to the details as is necessary for expert work. Hence our knowledge seems superficial and is superficial, in fact.

This criticism from the standpoint of the ideal of "thoroughness" leads often to a wholesale condemnation of American education. But the case looks different when one considers that directive power must not let itself be absorbed by details so much as to lame the power of combination and the sound judgment as to what ought to be done under the circumstances—so much as to destroy the alertness, in fact.

What has been condemned as superficiality on the part of the American very often amounts to a specialization on the main point at issue. It is concentrated on what is to be done; it is about to observe what new combination is to be made. This general question which concerns alertness of action is the paramount one for the present moment. And any analytic absorption in some special feature before the observer will cause him to waste his time on what is impracticable, unless kept strictly subordinate to the general question of cui bono—of what use is this particular thing which I am analyzing to science or to industry, or to any manner of human benefit which I have in view?

But thoroughness of specialization has its place in reenforcing the present moment by the application of the lessons of past experience. This is the strength of thoroughness in preparation for the collisions of the present. But these lessons can not be applied except by the man who is able to combine the details into one view with a rapid glance—and this is alertness.

Mr. Mosely sums up his reflections upon the educational system here as follows:

My observations lead me to believe that the average American boy when he leaves school is infinitely better fitted for his vocation and struggle in life than the English boy, and in consequence there are in the United States a smaller proportion of "failures," and fewer who slide downhill, and eventually join the pauper, criminal, or "submerged tenth" class. The aim of education in America is to make every boy fit for some definite calling in life, and my own experience leads me to think that nearly every lad if properly trained is fit for something. All can not be great successes, and clever, successful men are to a large extent born, not made; but I do believe that it is possible to teach every lad some branch of industry that will enable him to earn an honest livelihood and make him a help, rather than a burden, to society. As I have said, the true-born American does not become a drag upon his fellows, but takes his place as a respectable citizen, earning his living soberly and honestly.

Mr. Mosely quotes a table drawn up by Mr. J. M. Dodge, president of the American Society of Mechanical Engineers, on the money value of technical training in the United States. Its results are given in a graphic form, and show the progress in earning capacity of the groups to which it refers.

Unskilled labor begins at the age of 16 years at $3 a week wages and increases in skill and amount of wages for six years, when it has completed its career and arrived at a stage of arrested development in the twenty-third year at $10.20 a week.

The shop-trained laborer begins at the same age and wages, rises more rapidly, and at two years later reaches his full growth at the age of 24 and with wages at $16.80 a week.

The trade school does better than the apprenticeship system of shop training and turns out its students after three years of instruction at the age of 19 with an ability to earn $12 a week. Six years later, at 25 years of age, the wages rise to $22 a week, and may reach a maximum of $25 a week some years later.

The graduate of the school of technology has carried on his school studies for six years beyond the age of 16 and begins to receive on graduation at 22 the sum of $13 a week, and his wages continue to increase until ten years after graduation they amount to $43 a week.

Manual traning is commended in the general report signed by all members of the commission. "Such work appears to be in many ways of high value as an educational discipline."

Mr. J. R. Heape says of manual training in his report:

Manual training in the ordinary sense of bench work in wood was begun in America in 1879, when, through the efforts of Dr. Calvin M. Woodward, a manual-training school was opened at St. Louis, in connection with the Washington University. The success of this school led to the speedy organization of similar schools in other cities—in Chicago, Baltimore, and Toledo in 1884, in Philadelphia in 1885, and so on. In 1895 the Massachusetts legislature, under the lead of the State board of education, made it obligatory upon every city in the State of 30,000 or more inhabitants to establish and

maintain manual training in a high school. This has been one source from which manual training has spread; there has also been another, representing an opposite extreme of thought. It has grown from the kindergarten. The first source emphasized the utilitarian side, the other came purely as an educational idea. From the union of these two growths has resulted manual training as it is seen to-day in the States, not on the one hand entirely technical and utilitarian, nor on the other as distinctly educational as if it were wholly permeated with the spirit of the kindergarten. * * * It must never be forgotten that mere manual dexterity, or simply the deft manipulation of tools, is not the main object sought—the educational aim must always be kept well in view. Time that is spent in merely perfecting the manipulation required to construct a model which has already been sufficiently well made, is wasted; as an expression of thought and feeling, its purpose has been served, and the increased difficulties of the next step should be faced. A certain amount of manual training vitalizes the abstract book work and the undue amount beyond this point to give increased technical skill tends to draw away attention from abstract studies.

Mr. H. R. Reichel:

Manual training in all its branches forms one of the most remarkable features of contemporary education in America, and is exciting special interest in Great Britain. Having myself given particular attention to the subject for several years, I devoted much of my time to it, and especially to the manual training high school. This institution is a characteristic American development. It is essentially a city school and has two objects—educational and vocational—sometimes one and sometimes the other of these being the more emphasized. Educationally its function is to train a side of the mind which would otherwise be left undeveloped; vocationally, to fit boys to enter into the industrial and commercial life of the great cities after prolonging their school attendance to the age of 18.

W. P. Groser:

A very interesting, though, I think, uncommon, opinion is that of an authority—the general manager of the Baldwin Locomotive Works. He prefers a boy without manual training on two grounds. First, it takes six months to eradicate from such a boy the idea that he knows. He has to unlearn much, since his ideas and methods are not commercial; he wants to do things "too well" and to spend undue time on them. Secondly, he has rarely had such a good general education, since he likes the manual training and for it neglects less interesting work.

ON SCHOOL DISCIPLINE.

Prof. Henry E. Armstrong remarks of the elementary schools:

Two striking features in them * * * the air of refinement due to the attention paid to dress, especially by the girls, the preponderating element in most classes; and the attitude of familiarity assumed by the class toward the teacher. Distinctions such as poverty or occupation might well condition even in a democracy are scarcely perceptible. In America the teacher does not seem to be regarded as the natural enemy of the boy—as a person to be circumvented. The method of teaching, which appears to be generally adopted, involves, as it were, the constant exchange of opinion between teacher and pupil—not, as is here the case, either the communication of information to the class by the teacher, or the mere wringing of what is supposed to have been learned from the pupil by the teacher. This method has both its advantages and its disadvantages. * * * It develops that readiness of address which characterizes young Americans and leads children to give their opinions freely—far too freely, many think—on all sorts of subjects; and it encourages cuteness. * * * In American schools there is no enforcement of discipline by means either of penalties or of prizes. Children are put on a footing with grown-up people and treated as young republicans. * * *

Certainly one great cause of good behavior is the presence of girls along with the boys. * * * The chief hold teachers have on their classes is consequent on their maintaining the interest of the pupils. Many of my colleagues on the commission—not teachers—in fact, expressed the opinion on more than one occasion that the teacher was most interesting. But looking below the surface I did not feel satisfied with all that I witnessed. * * * In school, as in the world, uninteresting work must be done sometimes. * * * It is most important to acquire the art of doing uninteresting work in a serious and determined way. * * * It has some serious consequences. One of these is inability to concentrate the attention. Everywhere the heads of the high schools complained that the pupils who came from the elementary schools could not concentrate their attention upon their work.

WOMEN TEACHERS.

Professor Armstrong:

Most of us who are conversant with school work were struck by the distinctly low average of attainment in the American high schools. To what is this attributable? In part to * * * but in large measure also, I venture to think, to the prevalence of mixed schools and the preponderance of women teachers.

Admitting that it may be possible, even desirable, to bring up the two sexes together in the earlier years of school life, I venture to think that we must sooner or later come to admit that it is wrong to do so during the later years, if the object be to develop a virile man. To put the matter in very simple terms, it seemed to me on the occasion of my former visit—and the impression was confirmed during my recent visit—that the boy in America is not being brought up to punch another boy's head, or to stand having his own punched in a healthy and proper manner; that there is a strange and indefinable feminine air coming over the men; a tendency toward a common, if I may so call it, sexless tone of thought.

If coeducation be bad in itself, it becomes infinitely worse when the teachers are mostly women; they should rather be men mostly. Nowhere is the claim on behalf of women to equality with men put forward so strongly as it is in the United States. Nowhere, I believe, would it be found to be more disproved in practice, if carefully inquired into. * * * Women have shown—what it was unnecessary to show—that they are indefatigable workers; and they have shown that they can pass examinations with brilliant success. But what has been the character of the examinations?

* * * * * * *

Those who have taught women students are one and all in agreement that, although close workers and most faithful and accurate observers, yet, with the rarest exceptions, they are incapable of doing independent original work. * * * Throughout the entire period of her existence woman has been man's slave; and if the theory of evolution be in any way correct, there is no reason to suppose, I imagine, that she will recover from the mental disabilities which this has entailed upon her within any period which we, for practical purposes, can regard as reasonable. Education can do little to modify her nature. * * *

If it be the province of education to mold the race, there is no other question of greater importance claiming our attention at the present time—especially as the difficulty of obtaining male teachers is increasing day by day. In both countries it is imperative that we should discover means of attracting men with practical instincts and of superior mental gifts into the teaching profession.

SCIENCE IN THE SERVICE OF THE STATE.

Professor Armstrong pays a deserved tribute to the work of the Agricultural Department:

The most striking illustrations of American organizing ability are to be met with at Washington. So far as I am aware, there is nothing anywhere to compare with the way in which science is being utilized in the service of the State by the United States Department of Agriculture, which is located in the Capital. The origin and development of this Department are sketched in a separate bulletin published in 1898. * * *

The Agricultural Department in Washington is not merely an office—it is also a busy hive of research. A large number of laboratories are attached to it, in which investigations are being carried on, bearing, in one way or another, on problems in agriculture. * * * No question that the research work done under the auspices of the Agricultural Department and in the experiment stations is of the very greatest value, and is contributing most materially to the development of agricultural industry. * * * In 1884 the amount of sugar made from sugar beet was only about 300 tons, the beet crop of the past year is estimated to yield 400,000 fons; the amount of sugar made in the United States from the sugar cane being only about 300,000 tons. * * *

The work that is being carried on in New York State under the direction of Professor Bailey, the director of the College of Agriculture at Cornell University, Ithaca, may be referred to in further illustration, as this is now a head center of the nature-study movement.

Professor Armstrong concludes thus:

It is quite clear that the right spirit is at work in the United States: but the lack of the critical faculty and of depth of purpose, combined with an excessive development of the utilitarian spirit, are serious drawbacks at present and militate against

progress in education. Until higher ideals prevail, and sober calculation takes the place of a somewhat emotional and superficial consideration of its problems, it will be difficult to introduce reforms.

Mr. Fletcher remarks on the general good behavior of pupils and supports Professor Armstrong's views as to coeducation in this one respect:

I have spoken somewhat depreciatingly of the quality of the work—of the actual attainment, that is—in the schools. It is all the pleasanter to be able to speak in very high terms of their discipline and general tone. In nearly every high school I visited I was greatly struck and pleased with this. I generally went about alone, unannounced, and often unobserved, in the great corridors and staircases, and am satisfied that in the main I saw just the ordinary everyday behavior—and it was singularly good. * * *

I attribute it partly to the presence of girls. At these ages girls are more docile, more conscientious, and more anxious to work. Partly also to the presence of women teachers, who bring in gentler manners, and when they are good women—as they notably are—probably win more easily the consideration and good feeling of boys.

He discusses the coeducational effect at length in its other phases:

In the Western States coeducation (of boys and girls) is general, both in schools and in universities. In the large cities of the East and in the eastern colleges and universities it is more rare. In the West the system has grown up from the beginning, and I found very few people indeed who questioned its wisdom and, except at Chicago University, where men and women are now separated during the first two years of the course, heard of no attempt or wish to change it. In the East it was several times said to me that men (and boys) disliked the system, and when they were free to choose would go to a men's college or a boys' school rather than to a coeducational institution. One professor told me that in his opinion it effeminized the men too much—occupations and sports in which women could not join were dropped, and men took their exercise in dancing instead of cross-country running. Beyond these I got no tangible objections to the system. Morally, I think my informants without exception held it very beneficial. The head of a university told me that he noticed that classmates often subsequently married and that these marriages turned out notably well—men and women getting to know and understand one another thoroughly in the broad intercourse of university life and choosing wisely. I got some further confirmation of this view from old students who had married in this way. One, on the other hand (a bachelor), told me that they got to know one another too well, that the mystery was too much dissipated, and the attraction to marriage weakened. The two views are not perhaps as inconsistent as they seem at first sight. In the schools the girls are notably more mature than the boys, who seem rather to stand in awe of them, and the sex question is in abeyance—one might compare nature's arrangement to prevent self-fertilization in flowers where the stamens and pistil develop at different times. There can, I think, be no question that the influence of the girls—more diligent and more careful and conscientious in small matters—on the boys is good: these work better to escape being beaten. Conversely the robuster, more vigorous habits of the boys, and probably the better work of the best of them, do good to the girls and keep them from sentimental and fanciful ways and give more solidity and breadth to their work. If both necessarily took the same curriculum, there might be the objection that the girls were burdened with unsuitable subjects. The elective system of studies meets this difficulty: some subjects they take easily in common; others, boys or girls, as the case may be, rarely take. I saw no ground for thinking that the girls suffered from too much work to as great a degree as it is commonly alleged that they do in our own girls' high schools.

Doctor Gray, of Oxford, has presented some very suggestive views on our general practice of coeducation:

This point leads naturally to the question of coeducation, which, in practically all the secondary schools of the United States, is carried on up to the age of 18 or 19. Various opinions, no doubt, may be formed as to the moral value, or the reverse, of that system. The present writer, approaching his study of the matter with a very open mind, unhesitatingly declares that on the whole, from what he has observed, the advantages of this system in day schools and (he believes) also in boarding schools (when carried out under certain well-defined conditions) far outweigh the disadvantages.

The semimonastic system, under which boys, at the most critical stage in their life, are forcibly separated for nine months in the year not only from the refining

influence of mother and sister (as is the case in English boarding schools), but also from free and easy intercourse with girls of their own age, has very serious and obvious drawbacks. * * * The *camaraderie* between the sexes by the system of coeducation is, on the whole, vastly beneficial to the American boy and girl alike, and is largely corrective of (certainly in no way increases) the tinge of effeminacy which the preponderance of the woman teacher alluded to above is unhappily producing. There is an absolute absence (I might well add disappearance) of sexual strain; I found no trace of the awkwardness and shyness between the sexes which is a consequence of want of intimacy, and has a tendency to generate rather than to diminish such sexual strain, and which, existing to some extent in England and accentuated in France, leads, in my judgment, to artificiality and grave moral difficulties in the social system. I never observed on any occasion when I assumed command of the highest classes in American secondary schools, where boys and girls were being taught Latin or English together, a single indication, e. g., that, when a girl was called upon to "construe" or to answer, her utterances and her quasi-public appearance before the class was the signal for any amused recognition of the fact between the boys. On the contrary, the girl was regarded as the classmate and nothing more; no trace of sentimentalism was ever apparent. I may here add that the girls showed a far greater power of concentration than the boys; the attention of the latter seems to flag after half an hour's lecture, even when given by the more interesting teachers. On the other hand, when there was occasion for display of originality, as in the English literature lessons, there was no comparison between the two. The boys far outstripped and showed greater interest than the girls.

Doctor Gray condemns in some of its effects the "preponderance" of female teachers in the secondary schools, but praises some of their teaching:

I think that it is not straining a point to say that the preponderance of female teachers in the higher or secondary schools—I say of set purpose preponderance and not presence—has an effeminating effect on the character of American boyhood. There is a tendency for women teachers, when dealing with boys of such advanced age, to instill (unconsciously, no doubt) sentimental views of facts, rather than to derive principles of conduct from them. This was specially observable in lectures and lessons on English literature and English history, though I hasten to add that in the former subject I listened to some remarkable analytical and exhaustive teaching from the more able women teachers. It is a subject in which they excel.

Doctor Gray has also pointed out our defects in classical teaching and praised our teaching of English:

With regard to the Latin teaching, I found much inaccuracy and antiquated method on the part of the teacher. Looseness of translation is permitted to a degree at which even our moderately equipped teachers would shudder.

There is very little exercise in composition, and what there is, speaking broadly, leads to poor results. The teaching of French was more antiquated still. I found hardly any traces of the enlightened modern system which is rapidly coming into vogue in some of our progressive English schools, where the teachers and pupils talk in the language which they are teaching and learning, respectively.

On the other hand, the teaching of English was remarkably good, and far outstrips anything of which we can boast. I attribute this to the fact that it is a subject which, from the peculiarity of the component elements of American citizenship, has been emphasized from the beginning. It is inevitable that, when there is a vast tide of immigration daily pouring into the country of all nations and languages and tongues, there should be a deliberate and forcible attempt made to assimilate these heterogeneous elements by all the means at the disposal of the Government. The primary machinery to this end is the study of the English language from the kindergarten upward, and there has been on the part of the educational authorities a most scientific and comprehensive scheme for the inculcation of the Anglo-Saxon language in its linguistic, grammatical, and literary aspects. The teaching of English literature in the upper classes of the secondary schools is of the most masterly kind, and I have heard women teachers who are certainly not behind men teachers in the power of exciting interest in this most important subject of education.

Mr. Fletcher praises the discipline of our schools and criticises the teaching, but with qualifications:

The work in the schools is mediocre, the discipline excellent. My business was not, of course, to criticise the American schools, but to see what we could learn from them. This, however, necessarily involves such a consideration of their defects as may serve

to warn us against certain possible mistakes. In estimating the work of a school or class one is constantly exposed to the danger of comparing it with some ideal school (very likely one's own school "as it was in my day") which never existed; but still, making all allowance for the "personal equation," I am satisfied that I saw constantly work done and accepted which few English teachers would accept. I did not, on the other hand, see the grossly bad work which we often get. I concluded that on the whole their average—even of performance, certainly of effort—was higher than ours, but that there is little or no work which we should regard as really good. I can illustrate this most easily from the Latin. I seldom or never heard an absurd translation; I often heard very inaccurate ones, not infrequently uncorrected. The translation was generally very fluent, but there was no attempt at elegance, and it was mostly slipshod. As one teacher put it to me himself, "the American boy has the knack of getting the general drift of a passage, but if you cross-question him as to the details he comes to grief." Most of the work I saw in modern languages and in science was old-fashioned and, I thought, rather barren—too much learning of rules and facts, and too little use and thought.

Prof. John Rhys, of Oxford, speaks of the hesitation which he found among people here to attribute our success in commerce to education:

But Americans one and all are of opinion that to maintain the state of industrial and commercial eminence which they have reached it is impossible to give too much attention to the education of the young of every class in the community. The general belief was well expressed by President Roosevelt when he did Mr. Mosely and his commissioners the honor of receiving us—"Education is not everything," he said, "in the prosperity of the Republic, but to neglect education would be the ruin of the Republic." This is a lesson which Scotsmen have long ago learned, and there is no difficulty in teaching it to the Celts of either Britain or Ireland, but there is a type of Englishman, the undiluted Saxon, who can not realize it or form a correct idea of the nature of the modern competition for the trade of the world; so he consoles himself with the old-fashioned maxim that trade will always follow the British flag, and he fails to recognize that the flag to be so followed must in the future be the symbol not merely or mainly of brute force, but of brain power.

Perhaps I ought to touch in passing on the subject of the coeducation of the sexes, though I have no original contribution to make to the discussion. As a Welshman I have been acquainted with coeducation from the days of my childhood upward, and the University of Wales recognizes it to the fullest extent. * * * On the whole I am inclined to regard coeducation as offering young men and young women useful opportunities of sounding one another's character and temper; the comparatively few premature engagements to which it may lead are I imagine far more than counterbalanced by the number of unwise marriages which it prevents. At any rate the prevailing sense of America seems to favor it, especially in the Central and Western States.

He gives expression to his kind sentiments toward Americans:

The cultured American is always popular among us, but not one-half of his charm of manner and old-fashioned politeness is known to those who have not had the pleasure of making his acquaintance at home. An Anglo-Celtic nation which, while still in the making, has produced an Emerson and an Edgar Allan Poe, has a great future before it, not only in applied science and mechanics, but also in letters and refinement; and the mother country might do worse than take some wholesome lessons from so friendly and so promising a daughter; a few such have been pointed out in their proper places in the body of these remarks.

CHAPTER II.

EXTRACTS FROM THE REPORT OF THE MOSELY EDUCATIONAL COMMISSION TO THE UNITED STATES OF AMERICA, OCTOBER–DECEMBER, 1903.

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INTRODUCTORY STATEMENT.

The volume of reports of the Mosely Educational Commission comprises a preliminary statement and preface by the originator and inspiring chief of the commission, a joint report signed by the 26 members of the commission, and a separate report by each member. These individual reports are also summarized very briefly in the introductory pages. The preface by Mr. Mosely, and a full list of the members of the commission, are presented below, followed by the joint report of the members. To these selections are appended extracts from the individual reports, collected under appropriate headings.

In his personal report Mr. Mosely specifies the particulars to which the investigation of the commission were directed, and which it is evident from the special reports were kept constantly in view by the individual members. Apart from this general aim, they were to examine in their own way the educational matters which came under their observation. Mr. Mosely's standpoint was that of a business man whose opinions, even when in accord with those of the educational specialist, were reached by a different process. The entire commission was impressed by the intense belief of the American people in education, the lavish expenditure for its support, the conviction of business men that education is a good investment, the advantage to a nation of a liberal course of general education easily accessible to the masses, and the special importance of technical training as organized in this country.

With respect to the extent to which education has been a producing cause of the industrial prosperity of the country, opinions were varied. Many members of the

commission were disposed to regard education rather as an outcome of the energy developed by the wonderful physical resources of the country and the spirit of enterprise which these inspire. Mr. Mosely differs from this opinion. The impression made upon him by contact with American engineers in South Africa, as he explains, gave rise to the commission. This impression, it is interesting to note, was deepened by his observations in this country. But both his own convictions and the opinions of the able company of experts who formed his commission will be best gathered from the reports themselves as here cited.

PREFACE.

As the originator of the industrial commission to the United States in 1902, I propose in the present instance to follow the course adopted in connection with the report on that occasion, viz, to write a short introduction, giving my own impressions, not as an educationalist, but simply as a business man, and to leave the various members of the commission who have made a special study of education in practically all its aspects, from primary teaching in the board schools to advanced university practice, to state their views and conclusions in their individual reports.

The story of the origin of the industrial and educational commissions to the United States takes me back to South Africa some fifteen years ago. I had for many years been engaged in mining operations at Kimberly, which, in common with the work of the great bulk of the diamond diggers, had proved unremunerative, when Gardner Williams, the California engineer, arrived in South Africa and took over the management of the De Beers Company, which the late Mr. Cecil Rhodes was just then amalgamating. Gardner Williams in turn imported the late Louis Seymour. To the latter, by the way, the British nation owes a debt of gratitude for his engineering work in Natal in the early stages of the recent Boer war. By repairing bridges as fast as they were destroyed by the enemy, and so keeping open the lines of communication without which operations in Natal would have been impossible, he and his volunteer company did yeoman service, and ultimately he lost his life while leading some of his men to cover in the defense of a bridge at Zand River. Gardner Williams and Louis Seymour were followed by many other American engineers, including Perkins, Jennings, and Hammond, the two last, it is interesting to note, being graduates of Harvard University. Under the guidance of these able men and many others the development of South Africa was started, and in my opinion her mining centers largely owe their primary success and subsequent prosperity to their efforts. Others from England and elsewhere have, of course, helped, but to Gardner Williams and Louis Seymour belongs the honor of being the first to put mining in South Africa on a sound basis, and to begin the building up of what is now one of the most important industries in the world, and certainly one of the richest heritages possessed by Great Britain.

The success of these engineers turned my attention to the United States, and some years ago I paid my first visit there for the purpose of seeing what sort of country it was that was responsible for sending so many level-headed men to the Cape. I spent some months in the country investigating, and was astounded at what I saw around me, not so much at the state of development that had been reached at that time as at what I discerned of the future. I felt that a country teeming with such natural resources must, in the hands of capable men thoroughly acquainted with their business, play an important part in the future of the world, and was bound to exercise a far from negligible influence upon the industries of the United Kingdom. So far as I was able to ascertain, the form of education given in the United States is responsible for much of its success, and I returned home determined, if possible, to get together a party of experts to visit the country and test the soundness of my conclusions. I felt that not only must we investigate the educational system in vogue, but that the workmen, through their trades unions, should also be given an opportunity of seeing at first hand what is being done on the other side of the Atlantic. Holding these opinions, I organized my two commissions, the work of which is now too well known to require any long description from myself. The great question which the industrial side had to answer was: "How is it that the United States can afford to pay half a dollar in wages where we pay a shilling, and yet compete with us in the markets of the world?" The reply is to be found in my own views on the subject, and in those of the twenty-old delegates of the industrial commission as given in their reports. The subjects placed for investigation before my education commission were:

1. The development of individuality in the primary schools.
2. The social and intellectual effects of the wide distribution of secondary education.
3. The effect of specific instruction given (*a*) in business methods; (*b*) in applied science.
4. The present state of opinion as to the value of professional and technical instruction of university rank designed with special reference to the tasks of business life.

My first duty, which is only a pleasure, is to thank the good people of the United States, especially those connected with education, for the help they so freely offered on all sides, and for their hospitality—almost overwhelming in its volume. My original intention was that this commission should have started some two years ago. When with a view to preparing the way, I went to America provided with letters of introduction from Mr. Choate and Mr. Sadler to a great number of leading educationalists and other citizens, President Murray Butler, of Columbia University, generously placed his services at my disposal and undertook to work out the whole scheme for me; and since then I have made two trips to the United States and consulted with him, besides having had much correspondence in connection with the work. I can only express my deep sense of gratitude for having had the benefit of his untiring energies and magnificent organizing capabilities, which have rendered the task of the commissioners one of complete ease. The whole tour was mapped out for us, and at each place we visited committees were appointed to receive us and show us all that there was to be seen; and again, I must tender my thanks to those committees in New York, headed by Doctor Maxwell, of the board of education, and at the various points visited by the commission, for their devotion to our cause and for the infinite trouble they took on our behalf. The committees to which I refer consisted in most cases of from six to twelve gentlemen, representing various phases of education, so that we were able to separate into groups and to visit the particular institutions in which each delegate was more especially interested with the greatest advantage and the least possible expenditure of time. In every city to which we went banquets were arranged, and the principal educationalists there invited to meet us—a course inaugurated by President Butler, who, himself, two days after our arrival, gave us a most charming banquet at Sherry's, in New York, where we met not only local educationalists and notable citizens, but also the presidents and professors of universities for hundreds of miles round who came to discuss and to assist. On that occasion we listened to some most interesting speeches, as, in fact, we did throughout our tour. It was suggested by one of the speakers that the early pioneer spirit, which had to fight the Red Indian and subjugate the country, might well be responsible for the success of the United States apart from education. From this expression of opinion I beg to differ. During the many years I spent in South Africa I saw the same class of men visit its shores, and yet comparatively little progress was made, not because the country had no resources, but because education there had not reached the same high plane that it has in the United States.

On leaving New York the whole commission traveled to Washington, where President Roosevelt honored us by giving us a reception at the White House, and making a most interesting address to the delegation. One notable passage in his speech was the reference to his belief that while education could not make a country, the nation that neglected to educate its people would be assuredly undone in the long run. From Washington we journeyed to Baltimore, Philadelphia, New Haven, Boston, Niagara, and Chicago, certain of the commissioners seeing also many educational institutions off the beaten track. At Chicago the party, already reduced in numbers by various members having separated from it for the purpose of special investigations finally dissolved, some being dispatched on missions of inquiry as far west as California, others going West and Northwest, some into Canada, while a considerable number returned East via Indianapolis, Dayton, and Pittsburg. The longest stays were made at New York (some ten days) and at Boston and Chicago (a week each).

Although I do not desire in any way to encroach on the reports of the delegates, nor do I pose as an educationalist, a few remarks from myself may be of interest. One of the things that struck me all through the United States, was the large amount of money devoted to educational purposes, the buildings being magnificent and the equipment lavish. The teachers seem fired with enthusiasm, and there is a thirst for knowledge shown by pupils of all ages which is largely lacking in our own country. In contrast to our education, which has to a large extent been "classical," I found that in America it is the "practical" subjects which are principally taught, and technical classes and schools are to be found everywhere. There are also excellent opportunities for those going into the professions to take up classical subjects; but with the ordinary "everyday" boy who has to fight his way in the world, the bulk of the time is devoted to practical subjects likely to be of most use to him in after life. American boys remain at school much longer than is the case here, often in addition passing through to the secondary schools and colleges at little or no expense to their parents or themselves. I am dis-

posed to think that our own boys leave school much too soon. The arrangements here in regard to school vacations in agricultural districts are not such as best meet the needs of the farming class. In the United States the terms are so arranged that during harvest time, when the boys can be of real assistance to their parents and at the same time get the good fresh air from the fields, the schools are closed; but the Christmas vacation is very short. My observations lead me to believe that the average American boy when he leaves school is infinitely better fitted for his vocation and struggle in life than the English boy, and in consequence there are in the United States a smaller proportion of "failures," and fewer who slide downhill and eventually join the pauper, criminal, or "submerged tenth" class. The aim of education in America is to make every boy fit for some definite calling in life, and my own experience leads me to think that nearly every lad if properly trained is fit for something. All can not be great successes, and clever, successful men are to a large extent born, not made; but I do believe that it is possible to teach every lad some branch of industry that will enable him to earn an honest livelihood and make him a help rather than a burden to society. As I have said, the true-born American does not become a drag upon his fellows, but takes his place as a respectable citizen, earning his living soberly and honestly.

The types of men that the educational methods of America have developed appear to me to be entirely different from what we produce at home. President Murray Butler, for instance, is not only a man of great learning and high academic attainments, but possesses the initiative and organizing capacity that are required in a railroad president or chairman. Another instance is President Eliot, of Harvard University, who not only presides over that institution, but steps out into the area of public affairs to give the people the advantage of his great learning and experience; he is also one of the moving spirits of the Civic Federation—an institution for the settlement of labor disputes, not so much by arbitration after a rupture has openly occurred, as by bringing the parties together for conference in order that they may adjust their differences at the very earliest sign of a dispute. Again, President Harper, of the Chicago University, is a man of enormous resource and organizing capabilities, a professor of the dead languages, who has made a special study of Hebrew and the Semitic tongues generally; he not only manages this astonishing institution, but actually himself raised the money required to bring it into existence. Mr. Rockefeller, of the oil industry, has given immense sums to help this university. Pratt Brothers, in providing enormous sums of money for the Pratt Institute, besides giving it their time and attention, also form another striking object lesson; and the Cooper Union—supported by the Hewitt family, is performing more than useful service to New York. Many other names might be mentioned, for everywhere one is confronted with the same alert, up-to-date, organizing men, who possess these business qualifications in addition to their academic learning. How does this compare with our own professors and heads of universities, etc.? I must leave the reader to draw his own conclusions.

Another point that struck me was the intense belief of the Americans in the education of the masses. They feel that their country can not progress and prosper without it, and that if the people are to be raised it must be done through the medium of education. Not only do they see in it a "moral policeman," but they argue also that in the long run it is far more economical to educate the people than to have to support in the prisons, workhouses, etc., the unfortunates who, through an inferior education, or none at all, have been left unfitted to earn their livelihood. It is felt, indeed, throughout the United States that education is their safety and salvation; in the words of President Roosevelt, when addressing the commission at Washington (which I again take the liberty of quoting), "Education may not make a nation, but a nation would certainly be ruined without it."

Further, from a purely business point of view, Americans see in the money spent on education a magnificent investment for their country. Their conception of the matter from this aspect is well illustrated by a presidential address delivered in December, 1903, by Mr. James M. Dodge to the American Society of Mechanical Engineers, on the "Money value of technical training." [a] In this he outlines the actual progress made by four groups of men working in the mechanic arts—the unskilled labor group, the shop-trained or apprentice group, the trade-school group, and the technical-school group—and plots out his average results in a graphic form on the chart which is here reproduced. The curves scarcely need explanation; each shows the average progress in earning capacity of the groups to which it refers.

It will be seen that for the unskilled-labor group (though the data are lacking for its early progress) the maximum is lowest but is earliest reached. The apprentice, regarded as the representative of the shop-trained group, begins to earn $3 a week at the age

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[a] Mr. Dodge also expressed his ideas on this subject in a somewhat different form in the November number of the St. Nicholas Magazine, and I have to thank the editor for courteous permission to make use of the article.

of 16 ($3 a week for fifty weeks = $150 = 5 per cent on $3,000, which is, therefore, taken as his "potential or invested" value); his wages, and therefore, his value, rise rather more rapidly than those of the unskilled laborer, and his maximum is somewhat higher. The average member of the third group spends three years at a trade school, which he leaves at the age of 19 and gets a situation at $12 a week—as much as is earned by the apprentice group at 21—and his earnings increase up to $22 a week at the age of 25. Data are lacking to determine his further progress, but the presumption is that the rate of increase will slacken, and the curve will ultimately become parallel to that of the shop-trained man, though higher on the chart. The fourth class consists of those who stay at school till 18, and then study at one of the higher technical institutes till 22, when they begin practical work. At that age their average weekly value is $13, or $5 less than that of the trade-school group. But the difference is soon made up, and at the age of 25 the two groups stand level, but the curve of the technically trained men subsequently continues to rise rapidly long after that of the trade-school group has (probably) become level.

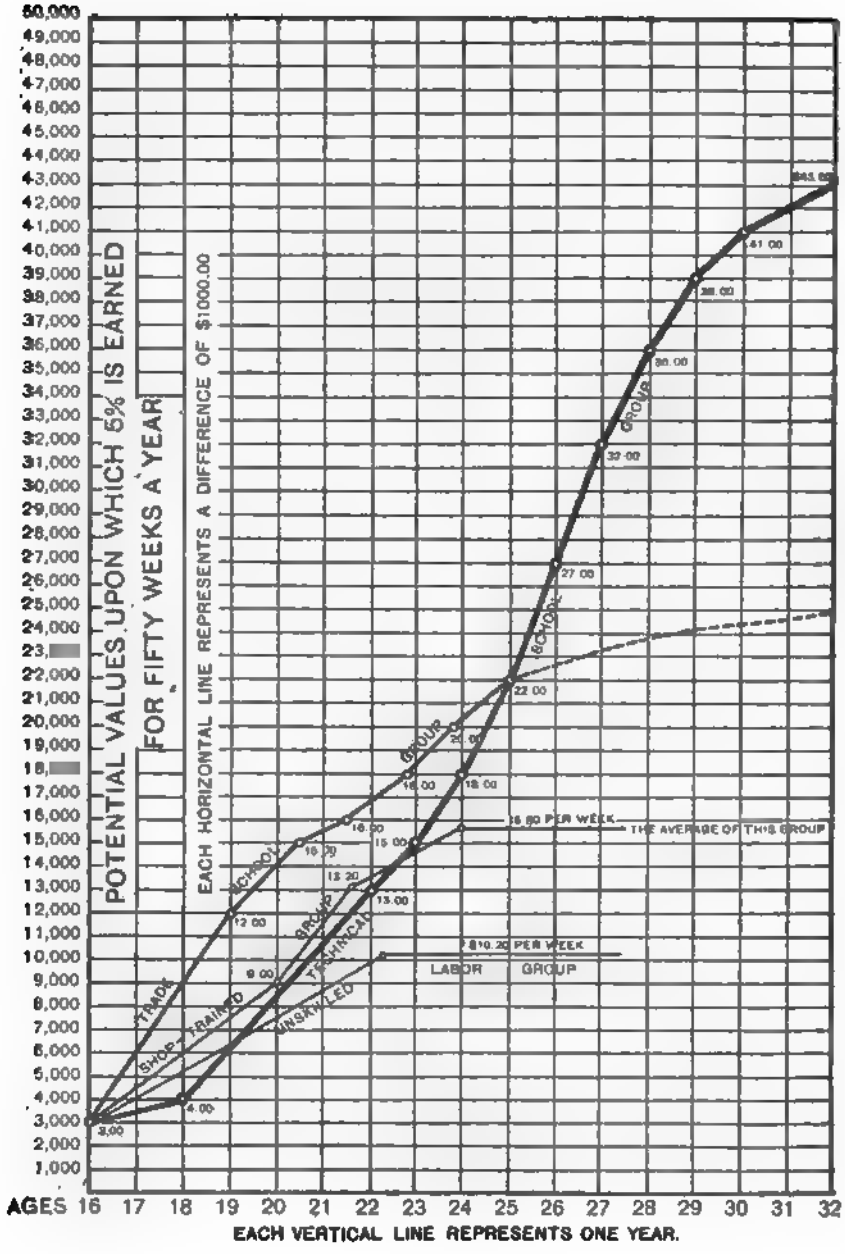
Again, while our rich men spend large sums upon sport of various kinds, it appears to be the hobby of moneyed Americans to devote enormous amounts of money to the endowment and equipment of various educational institutions. They pass their lives in strenuous work, and their labors in building up industries and developing territory are of infinite value to their people, recalling what was the ideal of the late Cecil Rhodes, viz, that the truest philanthropy consists in creating industries and fields of industry to occupy the masses and afford them remunerative employment.

It has sometimes been urged that the American is a materialist. Those who hold such an opinion can not, I think, have carried their analysis very deeply; and they fail to distinguish between materialism and ambition—qualities in reality as wide apart as the poles, although very easily mistaken at first sight. The one has every vice, the other every virtue. Personally, I credit the American nation with an intense ambition not only to raise themselves individually, but also to use their efforts for the raising of their fellows and for the furtherance of civilization.

Again, I have heard it urged in America there is no aristocracy but that of money. Once more I beg to differ. The contention may on the surface appear to be true, but if the matter be probed a little deeper it will be found that in reality the aristocracy of money is an aristocracy of brains, for the reason that since few of the people of the United States have, as yet, inherited riches, the fact that they have succeeded financially and become wealthy is a proof that they must have possessed remarkable ability and brain power in order to achieve their success.

I would mention that, though I was not in the States to criticise, I was desired by many of those interested in education there to do so; and although I prefer in general to leave this matter to the expert judgment of my commissioners, there were several notable points that struck me forcibly. One was the large preponderance of women teachers in all branches of education throughout the country. Personally, I should favor the employment of female teachers for both boys and girls up to the age of, say, 12 years; for the reason that (as it appears to me) the woman claims the sympathy of children in younger years, and understands the working of their minds in a way and to an extent that no man can. Beyond this point, however, I am in favor of turning the pupils over to men; and here, if I may say so, American education, in my view, requires some overhauling. Not only did I find comparatively few men engaged in teaching, but also few preparing to become teachers; and upon further investigation I discovered the reason to be in the smallness of the remuneration, which is insufficient to attract a good class of men. This I think a serious defect, and I venture to suggest that higher salaries should be paid to teachers of both sexes, but especially to men, in order to make it worth their while to take up the profession not merely as a duty but as a remunerative occupation. A second point I noticed was the neglect of musical talent among the school children. How music makes for a bright and happy home and tends to raise the standard of life from an idealistic point of view need not be enlarged upon, yet nowhere did I find instrumental music forming a part of the instruction, and in the few cases where vocal music was included it was but poorly taught. The same characteristic prevailed in the homes of the people, many of which I had the privilege of visiting on my various trips. Usually there was a handsome piano in the house, but I saw few signs of its being used. Occasionally there were also other instruments, such as harps, etc., but again, on inquiry, I learned that these were, in the great majority of instances, merely ornaments. Seeing how large a proportion of the population is of German or other foreign blood, all essentially musical, the neglect of this subject was to me a very surprising circumstance.

The question of sports in the American schools as compared with those of this country also impressed me. Of course the people of America are fond of sport and take a keen interest in baseball and football; but such matters do not form anything like so important a part of the everyday life of the schoolboy there as is the case here, and not nearly



THE MONEY VALUE OF TECHNICAL TRAINING.

so much time is devoted to them. Further, schoolmasters in the United States are chosen purely for their academic attainments and power of imparting knowledge to their pupils, without reference to their athletic qualities or achievements. The absolute devotion to sports, to the exclusion of almost all other interests, which of late years has crept into all classes of English schools, forms, I think, one of the weakest points in our educational system.

Although, as already stated, my position has been that of an observer and not a critic, yet having been asked to criticise not only American education, but other matters, I feel bound to say that during my travels in the United States I have seen many minor faults. I would, however, add that these faults are, in my opinion, merely those of youth. The country has grown too quickly, but on the whole I think its people are working out on sound lines the main problems that have to be faced by any young country. One often hears American municipal affairs referred to as unsatisfactory. Being but a visitor and not a resident, I have, perhaps, no right to pass an opinion, especially as I am unfamiliar with the particular points condemned; yet I can not help feeling that so long as residents and citizens of the better class remain aloof from public affairs so long will municipal government be of an unsatisfactory nature. The remedy is therefore largely in the hands of the people themselves.

Looking into the future of our own country, I feel bound to record my belief that the régime of the past, however successful it may have been, is obsolete. Honesty, doggedness, pluck, and many other good qualities possessed by Britons, though valuable in themselves, are useless to-day, unless accompanied by practical, up-to-date scientific knowledge, and such knowledge only becomes possible with an enlarged and enlightened system of education, such as the United States possesses. I feel that if we are to hold our position as the dominant nation—or one of the dominant nations—of the world we can not afford to lag behind in educational matters as we are now doing. What struck me in going through the public schools, whether primary or college, of the United States was the success attained in making the scholars self-reliant, in bringing out their individual qualities, and teaching them to reason. Professor Armstrong, one of the commissioners, in his presidential address to the educational section of the British Association at Belfast, in 1902, laid special stress upon this point, stating that while we recognize three "R's" in our system of primary education, we need to have four—the last being the development of the reasoning power in the scholar. In some respects this seems to me to be the most important factor of all in American education, and I think it largely accounts for the success of the pupils in after life. Their individuality and reasoning powers are developed to the fullest extent, and as a consequence they make up their minds at a comparatively early age to carve out a career for themselves. The teachers appear to be able to accomplish a sifting process whereby a scholar's strong points are singled out and developed, for it is being realized in the United States that all-round knowledge, although useful in itself, must in the present day of fierce competition be supplemented by the work of specialism; and the bulk of American boys on leaving school, I believe, start out with the fixed determination to take up a certain line of work, having largely fitted themselves for that occupation or profession while at the public school or university.

The teaching of the colored races in America was, I think, a novel feature to those of the commissioners who investigated it, and I venture to think the subject an important one when it is remembered that the British Empire is largely composed of colored people. The work that is being undertaken by Booker Washington for the uplifting of his people, the colored races of the United States, fills me with admiration and hope for their future, although I do not believe that (except in isolated instances) the colored races will ever become serious competitors with whites under similar conditions.

I am in hopes that much good will be the outcome of this commission of inquiry, and I think that many of its members will have been convinced, as I am personally convinced, that if the British Empire is to hold its own our old industrial methods will have to be dropped, and especially our present method of popular education will have to be changed. Enormous strides are being made by the United States, with its truly wonderful natural resources to draw upon. On the other hand, Germany, which is also making giant strides, has not such natural advantages, but has made her progress solely through the force of scientific knowledge and the education of her people. To come nearer home, one is confronted with the fact that the Scotsman's success, wherever he goes, is proverbial, and although doubtless his fine characteristics stand him in good stead the fact remains that Scotland has been ahead of England in the education of her people.

I am an intense believer in the ability and stability of the Briton, but he can not successfully face the competition of the world with the obsolete weapons now at his command. The warning of the Prince of Wales came none too soon. If we wish to hold our own in the world's race, we must indeed "wake up." We have magnificent

material; it remains with the nation at large to decide whether or not it shall be properly utilized.

I have just lately received a letter from Philadelphia containing the following paragraph, which I think so much to the point that I quote it exactly as written:

"Conservative schoolmen are never apt to approve of any fundamental improvement in educational methods. Such people in our country must be compelled to stand aside for the march of events. We can not wait for them to die, as nations have done in past centuries. The development of the steam engine, the application of electricity, the growth of great cities have come on so rapidly, utterly changing not only parental relations for a large part of the people, but also many industrial, moral, and civic conditions, that we find ourselves all at once up against several problems of vast importance, and we conclude that they must be solved by means of the schools. Old methods, however, will not answer the purpose of the new conditions, which demand intelligent training in the practice as well as the theory of morals and citizenship as in engineering in its various branches."

In conclusion, I must return for a moment to the early part of my preface dealing with the object of the commission. This, as set forth in the questions numbered 1 to 4, was to ascertain how far education in the United States is responsible for her industrial progress. In America, where there is so much to see, one is tempted to leave the main question and take up side issues. The essential feature of the inquiry was, however, never absent from my own mind. It was the principal object with which we started out, and all my efforts were directed solely to that end. I trust this was also the case with all the commissioners, and that it was the mainspring of all their inquiries; but how far it was so I must leave the reader to judge for himself.

A. MOSELY.

THE MEMBERS OF THE COMMISSION.

Arthur Anderton, esq., J. P., alderman, and chairman of the technical instruction committee of the West Riding County Council. (Nominated by the County Councils Association.)

Henry E. Armstrong, esq., Ph. D., LL. D., F. R. S., V. P. C. S., professor of chemistry in the city and guilds of London Central Institute.

W. E. Ayrton, esq., F. R. S., professor of physics in the city and guilds of London Central Institute, past president of the Institution of Electrical Engineers.

Thomas Barclay, esq., LL. B., Ph. D., late president of the Paris Chamber of Commerce.

A. W. Black, esq., J. P., mayor of Nottingham, chairman of the Nottingham Education Committee.

R. Blair, esq., M. A. (Edinburgh), B. Sc. (London), assistant secretary for technical education of the department of agriculture and technical instruction, Ireland. (Nominated by the department of agriculture and technical education, Ireland.)

J. Rose Bradford, esq., M. D. (London), D. Sc., F. R. C. P., F. R. S., professor of medicine, University College, London.

Harry Coward, esq., president of the National Union of Teachers. (Nominated by the National Union of Teachers.)

The Reverend Professor Finlay, S. J., F. R. U. I., member of the intermediate education board and the technical education board, Ireland; professor of political economy, University College, Dublin. (Nominated as official representative of the board of agriculture and technical education of Ireland.)

T. Gregory Foster, esq., B. A., Ph. D., assistant professor of English in University College, London, and secretary to the college.

W. C Fletcher, esq., M. A., late fellow of St. John's College, Cambridge; head master of the Liverpool Institute, Liverpool.

W. H. Gaskell, esq., M. D., LL. D., F. R. S., fellow of Trinity Hall, Cambridge; university lecturer in physiology.

The Rev. H. B. Gray, D. D. (Oxford), warden of Bradfield College.

W. P. Groser, esq., of the Inner Temple. (Representing Parliamentary industry committee, and to inquire into legal education.)

Alderman J. R Heape, J. P., vice-chairman of the education committee, chairman of the Rochdale Technical School.

The Rev. A. W. Jephson, M. A., member of the London School Board.

Magnus Maclean, esq., M. A., D. Sc , F. R. S. E., professor of electrical engineering in Glasgow and West of Scotland Technical College, Glasgow. (Nominated official representative by (1) Glasgow and West Scotland Technical College; (2) Edinburgh School Board; (3) the technical and secondary education committee of the Ayrshire County Council.)

The Rev. T. L. Papillon, M. A., vicar of Writtle, Essex; late fellow and tutor of New College, Oxford; formerly fellow of Merton College.

Herbert R. Rathbone, esq., B. A., barrister at law, member of the education committee and deputy chairman of the committee on elementary education, Liverpool.

H. R. Reichel, esq., LL. D., late fellow of All Souls' College, Oxford; principal of University College of North Wales, Bangor, and member of the Welsh Intermediate Education Board. (Nominated as official representative of university colleges of Cardiff, Aberystwyth, and Bangor.)

John Rhŷs, esq., M. A., D. Lit. (Oxford), Hon. LL. D. (Edinburgh); professor of Celtic, and principal of Jesus College, Oxford; fellow of the British Academy.

W. Ripper, esq., M. I. C. E., professor of engineering in University College, Sheffield; member of the Sheffield Education Committee.

Charles Rowley, esq., M. A., J. P., member of the Manchester Education Committee and of the Manchester School of Technology; chairman of the Manchester School of Art.

A. J. Shepheard, esq., chairman of the technical education board of the London County Council.

A. Edmund Spender, esq., B. A. (Oxford), barrister at law; director of Plymouth Girls' High School; member of Plymouth Chamber of Commerce Executive; member of committee of the *Mount Edgcumbe* industrial training ship.

John Whitburn, esq., member of the education committee of Newcastle-on-Tyne

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JOINT REPORT.

The undersigned, members of the Mosely Educational Commission, are deeply impressed by the evidence they have gathered in the United States of the absolute belief in the value of education both to the community at large and to agriculture, commerce, manufactures, and the service of the State. Although, in the past, the belief in education has been the effect rather than the cause of American prosperity, during the last quarter of a century education has had a powerful and far-reaching influence, and it can not be doubted that, in the future, it will become more and more the cause of industrial and commercial progress and of national well-being. They are satisfied that, in years to come, in competing with American commerce we shall be called upon to face trained men, gifted with both enterprise and knowledge. They desire to impress on the British public the absolute need of immediate preparation on our part to meet such competition.

They have also been impressed with the spirit which animates both teachers and pupils and by the manner in which the two classes cooperate in the schools and colleges. Willingness, if not an overwhelming desire, to learn seems to characterize the scholars, and teachers seem to be possessed of but one wish—that of helping their pupils in every possible way. The absence of class prejudices and of any "religious difficulty" serves most materially to facilitate the work of the schools.

The closest connection is being established between theory and practice, the practical bent of the men of letters and science and the breadth of their outlook being very remarkable. The services of experts in various branches of knowledge are, therefore, held in high esteem and are in constant demand.

The important part which manual training is beginning to assume in the schools struck them very forcibly. Such work appears to be in many ways of high value as an educational discipline, especially in developing handiness and alertness, and in familiarizing the scholars with constructive processes.

They have been much impressed by the liberality displayed, not only by the public but also by private donors on behalf of education, as evidenced by the wealth of provision in the form of buildings and equipment which is everywhere made. On the other hand, they observe that the remuneration of teachers is by no means always placed on a satisfactory basis, and they have also been led to view somewhat with alarm the growing preponderance of women teachers.

Lastly they would draw attention to the extent to which the work of education is organized and its various grades coordinated, whereby harmonious working is secured and overlapping avoided. The need of effecting such organization in this country, which was before apparent, now seems to them imperative, in view of the experience they have gained in the United States.

Although individual members of the commission have expressed their thanks both to Mr. Mosely and to all those who have assisted them in the United States, they wish in their collective capacity to record their high appreciation of the value of the opportunity which Mr. Mosely gave them to gain experience likely to be of signal value to them in carrying on their work at home. They also desire to acknowledge with gratitude the courtesy with which they were invariably received, and to express their deep sense of the obligation under which they have been placed by all who assisted them in their inquiries.[a]

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[a] Signed by all members of the commission.

EXTRACTS FROM INDIVIDUAL REPORTS RELATIVE TO PUBLIC SCHOOL SYSTEMS.

With respect to the systems of public or common schools as developed in the States and cities visited by the commission, their observations were naturally directed to particulars of special moment to England in the present effort at reorganizing and extending her own system. The methods of school administration adopted in this country, the division of responsibility between different classes of officials (as for example, State and local), school buildings and equipments, the training of teachers, the spirit and methods of instruction, the discipline, organization, and scope of public high schools, were one and all subjects of careful investigation by the majority of the members. Extracts from the several reports pertaining to the subjects indicated here follow. In each case reference is made to the author by name only; for further identification the reader is referred to the full list of members, page 18.

ADMINISTRATION.

MR. JEPHSON (pp. 211–216): The first general impression made on me was astonishment that, notwithstanding the lack of a central authority and the almost complete autonomy of the various States and the big cities, notwithstanding the fact that sometimes we met with a law of compulsory attendance and more frequently did not, notwithstanding that the initial age for schooling varied considerably, and the age for leaving school still more so, there was nevertheless a common type of educational methods to which all the States and cities conformed more or less. Briefly speaking, it may be described as a system where a board of business men look after the finances and appoint a superintendent with large powers to carry out school management.

The absence (except in the Eastern States) of any leisured class of citizens probably accounts for the adoption of this system of public elementary schools and their related high schools being committed to the practically undisputed governance of a superintendent. Whether the people of England would ever approve of such a system is not clear. It has many and distinct advantages: (1) an educationist has control of all schools; (2) changes can be made in curricula easily; (3) one man gets accurate knowledge of his teachers, and can promote the most deserving at once; (4) the whole of the schools are easily coordinated; (5) he arranges for the training and examination of teachers; (6) he inspects and examines the schools when necessary; (7) he arranges for the transfer of pupils to the high schools; (8) if the schools are not prosperous, the superintendent can be changed. The obvious disadvantage is that too much power is placed in the hands of one man; and secondly, that thereby worthy people are deprived of an opportunity of helping on elementary education, of whom we have abundance in England. There is a danger, too, of the system becoming stereotyped, as one man is less open to the onward march of progress than a committee. However, in America this system is universal and works well, and moreover the people are all quite satisfied with the results.

The second general impression made on me was again astonishment at the universal desire for education, and the best kind of education, evinced by all classes of the community. President Roosevelt said to us in the White House: "Education may not have made America, but America without education would be lost. It is the only security in a democratic state." Everywhere the desire for good education exists and grows, with the result that nobody objects to the large sums of money expended in education. In one place we heard of an economizing town council which, finding money scarce, abolished the kindergartens and the evening schools. Public indignation was so strong that after a few weeks the schools were reopened and the city fathers had to try another method of saving money. In many cities one-half of the total local expenditure was devoted to public education. In the State of Kansas (that huge wheat field of the States) six-thirteenths of the whole expenditure was for public education.

From the first it was obvious that we were dealing with an entirely different kind of public opinion on education from that which prevails in England. This may be partly accounted for by the fact that the whole community uses the public schools; all classes meet in the common school, consequently all classes agree in supporting education. This enthusiasm for education in America must be presupposed in every remark I may subsequently make.

Organization and method are natural to an American, and the third impression made on me was that their systematic methods were responsible for a good deal of the

success which has attended their administration of education, Schemes, plans, programmes, schedules abounded. No fresh subject could be properly taught until a scheme was drawn up, fully touching all the points and parts properly arranged. In the New York Board of Education, the thousands of cards, fully indexed containing information about each individual teacher of all kinds, afforded a really marvelous instance of the length to which organizing might be carried. There is a danger that this may be carried too far, and too much stress laid on the machine and not enough attention paid to the man who, after all, has to work the machine.

The fourth impression I carried away with me, was the admirable way in which the completely free system of schooling was correlated and coordinated. In every State and city, high schools are to to be found to which the children, having passed through (graduated) the public schools, are sent as a matter of course. These high schools (there are now 6,000 of them in the United States), take children from 14 years of age for a four-years' course, as a rule. There are ordinary high schools, classical high schools, commercial high schools, and manual-training high schools. I append here the courses of instruction in three of the four kinds of school.[a] I omit the commercial high school, as in my opinion too much importance is given to such subjects as shorthand, typewriting, and bookkeeping, which are, after all, only partially educational. * * *

The best children in the primary schools pass into the high school and continue their education till 18 years of age. They can then go to the normal schools or to the university for another four-years' course. All this education is given without charge or fee to the student. This fact accounts for its popularity with many, and also for the large number of students of all classes and kinds. Some of the universities accredit good high schools which come up to their standards, and receive the pupils from them without requiring an entrance examination.

This giving of a free education to all who desire it and can arrange for it is the one feature of the United States education which I desire to see reproduced among ourselves. It is true in the States that many parents deny themselves the small immediate wages of their boys and girls in order that the bright children may be fitted for better and higher positions when they enter the world of business, trade, and commerce. In time parents would do the same in England. The sharp, bright children having an opportunity before them to proceed in the work of education would incline to the high school rather than to earning immediate small wages, and moreover, steps could be taken to keep the bright children at school by those interested in them. It is obvious that each board or national school must have in it each year some one, if not more, sharp child who ought to go on with his or her education. At present these sharp children are lost to the State. A properly organized system of high schools will provide an opportunity for some of the best future citizens of England to advance to their natural capacity.

In most of the high schools evidence was forthcoming that the largest merchants and business men snapped up the young people from the high schools for their workshops and offices. Everybody in America works and has to work. Trade and commerce represent the ideal of an American citizen; consequently everyone has an incentive before him to work and work hard. There are advantages in not having a leisured class of citizens.

Buildings and Equipments.

Mr. H. Coward (pp. 80–81): We very soon found that the New York schools are very large, the latest opened containing nearly 5,000 scholars, although this is exceptional; the average elementary school usually contains about 2,500 scholars, made up of three departments—kindergarten, primary, and grammar. The buildings are on four, five, or six floors, with a playground in the basement, and often a good gymnasium on the top floor. No pains seem to be spared to secure good electric lighting, heat, and ventilation, though in one or two schools we visited the ventilation did not seem any too perfect. Everybody acknowledges that these buildings are too large, and that the education of the children would be much better conducted in smaller buildings. The reason given for these huge structures is the enormous price of land, but I am told that land is quite as dear in London as in New York, yet the London School Board has not fallen into the same error to any great extent. The buildings of New York are magnificent structures, and no expense has been spared to secure the very best that can be obtained. We saw some buildings that cost from £40 to £50 per child to erect, a sum which would frighten our school authorities at home.

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[a] The selected courses, which have been omitted in this account, were: General course and classical course, High School of Denver; manual-training high school course and course of study, fourth year, in the high schools of New York.

In the equipment of the schools we are also far behind our New York friends. Nothing "shoddy" or mean is found inside the New York school. "Whatever is the best, is the best for the school," is the motto carried out regardless of expense. On the front wall facing the scholars, and for some distance on each side, there are fixed slates of an excellent quality for teaching purposes. No easels or blackboards were seen in any school. The walls had an abundance of pictures and illustrations, but no maps were displayed, each room being supplied with a complete set of maps and a case to contain them. The principal of each school has an electric bell to each room in the school, and a speaking tube to every floor. He is also provided with an office and a clerk. There is a good wide platform for the principal at the end of the main room in each department, well supplied with chairs, tables, etc., of a good handsome appearance, little things in themselves, but calculated to surround the office with dignity, and consequently influence.

MR. H. R. RATHBONE, who was struck with the imposing architecture of the school buildings in this country and the great care taken to secure proper lighting, ventilating, and heating, was disappointed to find in nearly every instance a lamentable want of playground accommodation.

In the large cities [he says (p. 258)] this is explained by the great expense of land, and even in the younger States of the West, where the question of expense is not yet so serious, hardly anything is being done to supply this deficiency before it is too late. * * * In New York and other large cities the need for playgrounds is now being keenly felt, and something has been done in the recent buildings to meet it by utilizing the basement and roof of the school for this purpose. Americans, however, are not yet fully alive to the excellent opportunities for educational work which the playgrounds and playing fields afford. From the point of view of physical culture, they are most important, but it is not for this only they are valuable, as it can hardly be doubted that they afford a most excellent opportunity for the teachers to study the disposition of the children, and assist in the development of their characters. Moreover, no amount of physical training, especially when it takes place under cover, can, in my opinion, ever be a satisfactory substitute for free, spontaneous play.

THE TRAINING OF TEACHERS.

MR. ARMSTRONG expresses the opinion that the elementary schools of this country, at least in the larger cities, enjoy an advantage over the English elementary schools in respect to the training of the teachers. "Their teachers," he says (p. 15), "usually all pass through a period of high-school training prior to entering the normal or training school; their outlook is consequently, on the average, somewhat broader. The methods adopted in training teachers appear to be no less academic than ours."

REV. H. B. GRAY was impressed with the grasp that the American teacher has of the "scientific principle of teaching." This he attributed to the fact that the teachers "go through the complete course of the theory of teaching and of the principles of psychology." "It affords," he says (p. 167), "food for reflection, when one remembers that in England the necessity of scientific training for educators has been only recently, and still is grudgingly, acknowledged in the regions of secondary education."

Several of the members record very favorable impressions of the School of Education, Chicago University, and the Teachers' College affiliated to Columbia University with its auxiliary schools, i. e., the Horace Mann Observation School and the Speyer Practicing School. With respect to departments of education which form integral parts of university organization, the opinion is expressed by Mr. FOSTER (p. 124) that—

while good work and substantial progress are being made at these universities, it is clear that the work of training, especially that of training to teach certain defined subjects, can not be altogether met by the ordinary university staff who teach these subjects. But while many in America are willing (and where they are not willing are obliged), as they are in this country, to accept the university degree as an indication of the power to teach, there is, on the other hand, a growing number that believes in the importance of training. He adds:

The important fact brought home to one by all this is that very large numbers of those in authority in America have recognized the need for the professional training

of teachers of all grades, and that active steps are being taken to provide the training that is deemed necessary. In this way and in others already alluded to, it will be seen that the teaching profession in America is rapidly acquiring a dignity and force that must make it a great national power.

REV. A. W. JEPHSON (pp. 227–228): With regard to the training of teachers in America our experience varied with the different States visited. Naturally New York, with its boundless resources, was fairly well able to supply itself with the necessary staff for its schools, but the effect of the competition caused by the higher salaries offered by New York than other places was felt even in Washington, 228 miles away. In Boston and New York and several other important centers the training of teachers was adequate and admirable. But this was only in a few favored spots. * * *

In some of the places we visited the training was conspicuous by its absence. In fact, in a large number of schools, what are known in England as "Article 68 teachers"[a] were the only ones possible. Owing to the small pay and meager prospects of the teacher, the number of men employed is getting smaller and smaller.

Mr. Jephson was particularly impressed with the work of the Peabody Normal School, Nashville, Tenn., and also with the institute work at Knoxville, under the auspices of Tennessee University.

THE ELEMENTARY SCHOOLS: METHODS AND SUBJECTS OF INSTRUCTION.

MR. H. E. ARMSTRONG devotes several pages to a consideration of the common (graded) schools, noting in particular what appeared to him to be defects. He says, in part (pp. 9–10):

In interior arrangements even the most modern schools are not superior to our own. And there is even less attempt made in them to provide pictorial decoration. Thring's great doctrine of thinking in shape has, if possible, made less advance thus far in the American common schools than in ours.

Much has been said of the importance attached in the American schools to the teaching of patriotism and to the practice of saluting the flag, which prevails in them. This involves the recitation occasionally of the formula: "I pledge allegiance to my flag and to the Republic for which it stands—one nation, indivisible, with liberty and justice for all." This appeared to me to be a somewhat perfunctory exercise when I witnessed it. Thinking Americans with whom I discussed the question seemed to regard the practice as of some value in cities like New York and Chicago, where a large alien element has constantly to be absorbed into the population; but apparently they were of opinion that it was undesirable as a general practice.

It is almost unnecessary to say that the amount of attention paid in the common schools to reading and composition is in no way sufficient or satisfactory, the neglect of English among English-speaking people being proverbial. Apparently no greater effort is made in the American schools than in ours to lead children to read and to become really fond of reading.

The teaching of drawing is also undeveloped. Simple measurement work in association with drawing, which is being so much advocated here and which is gradually assuming importance in our schools, seems to be almost, if not quite, unknown. I did not learn that the attempt was being made anywhere to put the teaching of arithmetic on a practical common-sense basis.

Although manual training figures in the programme, the interpretation put upon the term seems to be very different from that which is usual here, drawing commonly counting as manual training. In some of the schools, where space permits, woodwork is introduced into the upper classes for boys, and cookery and needlework for girls. The belief in such work is evidently growing; but at present the schools are undoubtedly behind ours in promoting it and even more bookish than ours in their tendencies.

The nature-study lessons I witnessed, when not specifically botanical or zoological and scientific in character, were eminently superficial and worthless.

As all classes attend the common schools, these can not be compared directly with our elementary schools, but must be thought of in connection both with these and with all other types of preparatory schools.

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[a] Article 68 of the Day School Code provides for the employment of women over 18 years of age as additional teachers if approved by the Government inspector, although they are untrained and uncertificated. It will be noted that they are to be employed under a certificated principal.

The REV. T. A. FINLEY observes (pp. 101–102), with respect to the teaching in our elementary schools, that "in the teaching of every subject the end pursued appears to be a prompt and ready use of the knowledge given, rather than laborious thought and personal mental effort on the part of the pupils." He says further:

The task of the American elementary schools differs in two important respects from that fulfilled by our schools at home. In the first place, they have to form to American citizenship and to train to English forms of speech the children of the immense bodies of foreign immigrants who are pouring into the country. This they do with remarkable success. The skill with which children, who in the home circle use only Italian or Yiddish, are brought to employ English as their familiar tongue, and with which they are imbued with sentiments of American patriotism, is beyond all praise.

In the second place, they do not aim at educating the unskilled laborer for his work in life—the unskilled laborer of America is supplied from abroad, from Italy, Hungary, the Slav countries, and Scandinavia, and at present in diminishing proportion from Ireland. No boy in an American school looks forward to digging and delving for hire as a means of livelihood, nor does any girl contemplate domestic service as her future work in life. Speaking to a contractor who had thousands of men employed on the earthworks of an important contract, I asked him how many of his laborers had been educated at an American school. He answered promptly: "Probably not one." On leaving school the American boy enters an office, a store, or a factory, or becomes apprenticed in a skilled trade; the American girl becomes a bookkeeper, a clerk, a stenographer, or factory worker. She also finds her way into the skilled trades. In New York there are 250 girl members of the printers' trade union. I saw some of them at work as linotypists. They were earning up to $23 a week, and I was assured by the foreman that they were among the best workers in the printing office. I also found girls in charge of the complicated and delicate machines of tool factories. They were paid $25 a week. In America machinery has been so perfected that dexterity rather than muscular force is required for its use. Where dexterity is the one requirement the girl may be quite as competent a machinist as the man. And this being so, there is no reason why she should not find ready employment and be admitted into the union of approved workers. It was noticeable in the case of all these girl artisans that they brought with them to their duties those habits of cleanliness, neatness, and order in their persons and their work which it is a chief aim of the American school to inculcate and to form.

MR. W. P. GROSER (pp. 174–175): The common schools vary in every way and to every degree, for each State has its own system and each teacher his or her own individuality. The average of attainment in them is no higher than in England. The progress is slow; the methods are discursive. But the relations between teacher and pupil are much closer, the method of discussion is employed with great benefit to mental development, the pupil's mistake is followed up psychologically, and by these means a more inquiring and critical attitude of mind is produced, with a greater appreciation of the value of education.

The anxiety to hold the attention and the constant divergence into related but irrelevant topics possibly cultivate a large sense of personal importance and an inaccurate and superficial habit of thought. But a recognition of the unimportance at this stage of the acquisition of specific knowledge, and the all-importance of a spirit of inquiry, individuality, and initiative, is general in the United States. These qualities lead the workman to continue his education, to read the newspapers, and to appreciate the interrelation of branches of knowledge. His intelligence on leaving the common school is not developed to a higher average, but is of a more curious and alert type. Instruction in what may be termed the elements of civics and the insistence with which the national idea is kept before his mind tend to influence his conception of a citizen's position and duties. His association with boys of a higher social station is a factor in the production of the democratic spirit, and has a considerable influence on his subsequent relations with his employers.

MR. HEAPE was impressed with the excellent foundation laid in the kindergarten for "the observation and manipulative work" which follows in the elementary grades, and with the "intensely interesting methods" adopted in the latter. With respect to drawing he says, page 205:

Especially is it noticeable how much use is made of drawing in the schools, not drawing looked upon as an irksome task from uninteresting and uninspiring flat copies, but drawing as a natural mode of expression of the child's thoughts. Nearly

every class room is surrounded by wall slates, and on these the scholars are accustomed to draw, frequently making sketches of the characters about whom they are reading, and of the incidents narrated. If they have been on an excursion with the teacher (a quite frequent occurrence), they sketch the objects that most impressed them. In numberless ways this mode of expression is cultivated. In many schools much use is made of color, and the brush is put into the child's hands before and in preference to the pencil. Nature study is frequently an important item in the curriculum. By these means the power of accurate observation, which is so marked in young children, is cultivated, and the facility gained of its being recorded. It is a training in the coordination of eyes, brain, and hands of the utmost importance.

Much work on these lines is already being done in many English schools, but it seems to the writer to be well worth very full and careful consideration as to how far these methods can with advantage be more widely utilized here, especially for our public elementary schools. They certainly vivify the teaching, arouse the keenest interest in the child, stimulate his originality, call out his powers, increase his modes of expression, and, in addition to the actual knowledge acquired, a real lively interest in the work is gained, and this habit of earnest application is carried forward to the higher schools, provided that the curriculum of the latter affords scope for the continued development of the aptitudes thus formed in the earlier stages of training. There is another very valuable result. In working and finding out things for himself a child is accustomed to refer to books placed freely within his reach, and he thus acquires a habit of the very greatest value. A few books of reference in each class room and encouragement to use them are found a valuable instrument in education and in forming habits of self-improvement.

REV. A. W. JEPHSON (pp. 225–226, 227): With regard to the elementary schools (I purposely use the English terms) one or two matters stand out prominently. There are no infant schools. In many places there are kindergartens where one or two classes of children are taken at 6 years of age. These kindergartens are by no means universal, and in many places are still maintained by private benefactions, as the local school authority is not yet convinced of their utility. Our system of infant schools, with the methods now almost universal, at least in London, seems to me to be a far better preliminary training for the graded school. In America the work of teaching children of 7 the elements of all instructions is very hard, indeed.

The grading of schools in America is similar to our own method, but the rule of "graduating"—i. e., passing through each of the 8 grades and then solemnly receiving a formal certificate of the fact at an annual function, seems to me worthy of imitation, as it emphasizes the importance of going right through the school and being able to show the certificate as proof of work done. Moreover, a child can not, as a rule, go to the high school unless he has "graduated" in the primary school. The importance attached to "graduation" is common throughout America, and even in the Sunday schools maintained by the various religious communities "graduation" is the rule, not the exception—i. e., a child must pass through every class in the Sunday school just as he or she passes through every class in the grammar or common school (elementary school) before the certificate is given. Another fact which impressed me greatly was the obvious intention of every teacher to get each child to do something of itself. Even in kindergarten the little ones were asked to choose a color and then select beads or sticks of that color. In grade 1 the children were given a series of figures and were expected to make up their own simple sums. Questions from the children were welcomed and were being constantly put, even in the presence of strangers. As we went from room to room in almost every school we visited we were struck by the large amount of initiative displayed by the children, and this was encouraged by every means in the teacher's power. The children were taught to think, and their studies were intended to train them to observe, to imagine, to reason, to feel, to will, and then to express. One principle underlies the work and determines the method—things, not signs, for things are the true source of knowledge. Objects, facts, phenomena are observed, but then they are always compared, classified, and related. Analysis and induction are used as a means of training. The child from the first is accustomed to think for itself. As Sandy McKay says: "A mon kens only what he has learned hisself." I watched with interest boys putting a little original ornamentation into their woodwork, or the girls doing a little pretty stitching out of their own heads. The children were given a story to read by themselves, and next day one is asked to repeat it, and by means of others in the class to get the whole story straight. Or perhaps half a story is told, and the children are then invited to finish it for themselves. In drawing, something is always left for the child's originality. In music (all music is taught by the old notation throughout America) children were asked to write themes on the musical lines and then the class sang them over in turn. As each child sits at a single desk, order is perhaps more easily

obtained, but the very friendly relations between teacher and pupil were really delightful to witness. And this, too, is common throughout America. It was the evident interest taken by each in the others. It was the elder sister and the little ones of the family. This was borne in upon me again and again. There are no school prizes in America.

Nature study is made a great deal of, and in as far as it encourages observation and knowledge of actual things it is no doubt a good thing. Yet there is a danger lest the matters treated of should be divorced from their proper surroundings and place in the everyday life of the child. The plentiful supply of books both for teachers and children struck me as remarkable. The amount of home work done is more than we could obtain in England. Parents in America like to see what the children are doing in school, and make proper arrangements for the child to study at home. Another fact which impressed us all was the teaching of patriotism. The flag of America is made very real to the children. In New York and elsewhere the children daily salute the flag and swear fidelity to it—perhaps necessary, as there are so many foreigners in the schools—and everywhere the history of the United States is fully and completely taught. I was glad to find that the old text-books which inculcated hatred to England are being given up and others substituted which contain nothing to which any sensible Britisher can possibly object. "Civics," as it is called, forms a prominent feature of almost every school, elementary and otherwise. Books are used on this subject in every school, and far better books than any I have seen on the subject at home. The result is that every American child knows the extent of what I may now call the "American Empire, Guam, and all." He knows the States and principal towns, rivers, and mountains, and, better still, he knows how he is governed and why. All the complicated arrangements for the election of President are well known. He knows the ministers of state and what each is responsible for. He knows all his own State officials at least by name, and can tell you what they do. This teaching of civics seemed to me admirable and might well be copied. Not that I wish to see the "flagolatry" of New York introduced into our schools, but I am strongly of opinion that the Union Jack ought to be displayed on all national occasions, and the children should know something of its history. The books used for teaching American patriotism would be a revelation to most of our authors, compilers, and teachers. * * *

One severe criticism must be made, and that is in the matter of attendance. As I have before stated, some States have adopted laws for compulsory attendance at school and others have not. The American fights shy of compulsion anywhere and everywhere. There is no systematic dealing with absentees. The attendance officers are far too few for the work, and in all the large cities there must be many children who are without education. The spirit of the people is, I know, in favor of sending the children to school, and it is a disgrace to an American citizen not to know how to read and write. Still the fact remains that there is no regular annual scheduling of the children as we have at home, and provision is not made for a place for each child and each child in its place.

Mr. H. R. Rathbone (pp. 262–264, 265): Of the teaching methods in American schools it is, I believe, very easy to come to an unfavorable conclusion somewhat unjustly. In order to judge them fairly one must, I think, first realize the objects American educators have in view and the difficulties with which they have had to contend. The essential feature of the system is the mastering of the contents of certain well-selected text-books, which, as a rule, are very well written, and before being used are submitted to a severe criticism from a host of critics, who are very often able teachers. No doubt this system was first adopted because it was the easiest and most suitable for use by the partially educated and almost untrained teachers, but in the hands of well-educated and skillful teachers I am not yet satisfied it does not afford opportunities for excellent work. With a few teachers it is simply a system of memorizing the contents of the text-book, but with the majority this is not the case. Questions are carefully considered beforehand by the teacher, and are designed so as to probe the knowledge and stimulate the thought of the children. Children, when well taught by this method, seem to catch something of the spirit of research, and feel that through books one of the avenues of knowledge has been opened to their unaided efforts. Librarians in charge of the children's departments in many of the public libraries I visited assured me that children of all ages frequently came to them for advice as to books which would give them additional insight into some subject they were studying in class.

The problem which the American educators seem to me to be attempting to solve is how to give the children those qualities which will make them good citizens and competent workers, men and women who will be resourceful, self-reliant, and adaptable, who will be able to observe accurately, record their observations correctly, compare, group,

and infer justly from them, and express cogently the results of these mental operations. They desire, no doubt, that in addition to these qualities and others that might be mentioned the children should have sufficient knowledge to enable them to deal effectively with the problems which they will have to face in after life, but it is the qualities and not the knowledge to which they appear to attach the most importance. What the boys and girls are, not what they know, when they leave school, appears in their consideration to be of the first importance. It is useless, they say, to teach children to read if you do not also teach them why and what to read, and if, when they leave school, they have no desire to read anything of an improving character. They desire, of course, that the boy shall have the knowledge as well as the qualities, and they hope, no doubt, before long to be able to so alter their teaching methods as to effect both objects, but in the meantime they think it is better to concentrate all their efforts on the formation of character, even if in so doing they may give but little knowledge, as when a child leaves school, if he has been rightly trained, he will soon acquire most, if not all, of the knowledge needful to him. I do not think it can be doubted that no small measure of success has attended the efforts of American educators to attain this end.

I have spoken to many business men, English and American, who have offices or works on both sides of the Atlantic, and nearly all agreed that as a general rule the American boy on leaving school, even if he does not know more, which he often does, is more intelligent, resourceful, adaptable, harder working, and more anxious to continue to improve his education than is the English boy of a corresponding age. On attending the American libraries one can not, I think, fail to be struck with the excellent class of literature which is in constant demand by members of even the humblest ranks of society. The attendance at public lectures, evening classes, summer courses at universities, and other similar educational institutions is enormous. From these facts and others of a similar character, I can not help feeling that the American people, as a whole, do not consider their education at an end when they leave school or the university, but realize that they must go on learning all their lives; or, to put the point in another way, the American does not regard the period he spends at school or university as something separate from the rest of his life, but as part of his life. The English boy, on the other hand, too often thinks that he is only beginning his life when he leaves school; the time spent at school is something that has to be gone through, and the sooner it is over, and he has completed his education, the better.

The fact is, I believe, the best work of a school can not be judged by anything an occasional visitor or examiner will see being done in the school. The teachers, who are constantly with the children, may be able to form some estimate of it, but it is only by watching the children after they have left school it can really be tested.

In order to get the training they desire for their children, American educators have introduced new subjects, with the result that the curricula are, generally, overcrowded, and nothing is thoroughly taught. They are beginning, however, to more and more realize that although some subjects are of greater educational value in the hands of some teachers, and for some children, than others, yet it is not the subject, but the way in which the subject is taught, that is of importance. No one recognizes better than the Americans themselves this weakness in their educational system. It is receiving the most earnest consideration from American educators all over the country, and great improvements are every year being effected. In the "Report of the committee of fifteen on elementary education," to which I have already referred, the questions what subjects should be taught, when they should be taught, and how they should be taught are discussed, and the conclusions of the eminent educators who formed the committee are set out.

Another consideration which should be borne in mind in estimating the value of the work done in the American schools is that many educators think that the attempt to secure what is called thoroughness in the branches taught in the elementary schools may be and is very often carried too far, in fact to such an extent as to produce an arrested development (a sort of paralysis in the mechanical and formal stages of growth), and that the mind in that state loses its aptitude for general studies and wider generalizations. * * *

As far as I could judge there is very little direct moral teaching of a formal, didactic character in the American schools. In the opinion of many of the leading educators, I gather, it is generally a waste of time, and may be positively harmful. Yet the training of the heart is by no means neglected, especially in the first six grades. Most of the teachers regard the training of the characters of the children as the most important of the duties intrusted to them, and never, in any of their work, lose sight of it. Indirectly, especially by the improved spirit of discipline, the teaching of history and English literature, a great deal of excellent moral teaching is given.

I had the pleasure of listening on one occasion to a history lesson given by a very able teacher at Brookline to a class of children about 11 years old, where the children took

the keenest interest in the character of the leading personages who lived in the period which they were studying, and frequently discussed their conduct. I was delighted to see how much excellent moral instruction the teacher, with consummate tact, managed to get into this lesson; yet I hardly once heard her express her own opinion, and she seemed rather to be leading the children to make discoveries for themselves. Never have I seen a class so intensely interested in its work, and I am sure there was not a child in the room who was not really sorry when the lesson was over. * * *

All American schools begin work by collecting the children together in the assembly hall. A chapter of the Bible is usually read and a hymn or song is sung by all the children together, after which the head teacher, or some one else invited by him to do so, addresses the children. In this way, no doubt, some direct ethical teaching is given, but as to its value opinion is much divided. No doubt these meetings afford valuable opportunities, but the teachers who are capable of making good use of them are limited.

Before passing away from this subject it may be well to mention a point to which many American teachers attach considerable importance, the unifying of the home and school life. In many places I found it was customary to hold one or two meetings each term of the parents of the children at the school, and for the teachers to visit at the homes of the parents, special times being set aside to enable them to do this.

Mr. C. ROWLEY, who agrees in general with the favorable opinions of the elementary schools expressed in the above citations, notes also the system of topical lessons as presented particularly in the schools of Washington, and the admirable manner in which civics is taught as examples worthy of imitation in English schools [a] (p. 347).

SECONDARY EDUCATION.

The provision of public high schools in the United States was the subject of special investigation on the part of the members of the commission. In general they express the opinion that the organization of secondary education as part of the public school system induces a larger proportion of young people to prolong their studies than is the case in England, and also results in a more uniform level of attainments on the part of students entering the higher institutions. It is noticeable, however, that while the liberal provision of public high schools and the spirit which pervades them are highly commended, a large proportion of the members of the commission agree in their criticisms of the methods of instruction. The average opinion of the members on this subject is fairly represented by the following extracts from the report of Rev. H. B. GRAY:

The methods of teaching, on the whole, are admirably conceived, though they are often not skillfully carried out. There is no "cramming;" there is a great deal of "elicitation." Pupils even in classical lessons are taught to ask the reason why, and their intelligence is drawn out; facts are not stuffed in.

Teaching of languages.—With regard to the Latin teaching I found much inaccuracy and antiquated method on the part of the teacher. Looseness of translation is permitted to a degree at which even our moderately equipped teachers would shudder. Really good scholars in the secondary schools were rare, though I can make one or two favorable exceptions which came under my observation—notably, a classical teacher in Brookline School, Boston. There is very little exercise in composition, and what there is, speaking broadly, leads to poor results. The teaching of French was more antiquated still. I found hardly any traces of the enlightened modern system which is rapidly coming into vogue in some of our progressive English schools, where the teachers and pupils talk in the language which they are teaching and learning, respectively.

Teaching of English.—On the other hand, the teaching of English was remarkably good, and far outstrips anything of which we can boast. I attribute this to the fact that it is a subject which, from the peculiarity of the component elements of American citizenship, has been emphasized from the beginning. It is inevitable that, when there is a vast tide of immigration daily pouring into the country of all nations and languages and tongues, there should be a deliberate and forcible attempt made to assimilate these heterogeneous elements by all the means at the disposal of the Government. The primary machinery to this end is the study of the English language from the kindergarten

[a] For additional citations relative to the methods of instruction and discipline in American schools see Chapter I.

upward, and there has been on the part of the educational authorities a most scientific and comprehensive scheme for the inculcation of the Anglo-Saxon language in its linguistic, grammatical, and literary aspects. The teaching of English literature in the upper classes of the secondary schools is of the most masterly kind, and I have heard women teachers who are certainly not behind men teachers in the power of exciting interest in this most important subject of education.

Mathematical and science teaching.—The mathematical teaching was, on the whole, good, its success being due partly to the influence of French methods which had vogue in America in the last decade or two of the nineteenth century. In the better known schools and in the colleges Euclid had been more or less successfully dethroned in favor of the new geometrical methods.

The teaching of science in all its branches appeared admirable, being, of course, largely helped forward by the magnificent apparatus and liberality of space, which are at the disposal even of the beginners in this subject in the secondary schools, while the emphasis laid on the subject through all the stages of American education has rescued it from being, as it has been till lately regarded elsewhere, the Cinderella of the educational family. In the universities the same elaboration of appliances attracts a huge number of students, and there is an admirable percentage of men who are imbued with a spirit of research beyond the mere requirement of degrees—a spirit which augurs well for the future inventive power of the American people, already preeminent as they are in this power among the nations of the world (pp. 167–169).

Mr. ARMSTRONG, it may be noted, differed from Mr. Gray in his estimate of the teaching of mathematics and science. The former observes:

> In the teaching of mathematics and science the American high schools seem to me to be considerably behind our best schools. I came across little evidence that the practical methods of teaching mathematics and geometry, which are coming into vogue here, are appreciated, and the old academic methods of teaching science seem to prevail almost exclusively. No proper foundation for such work is laid in the elementary schools.

The general advantage of a close relation between elementary and secondary schools is recognized by members of the commission, but several of them note that under the American system there is a loss of time for the children who pass on to the secondary schools. According to Mr. Foster it prevents children from beginning "the more difficult and testing subjects that belong to a secondary curriculum until they are 14. It leads also to failures that would not occur if the age of beginning these more difficult subjects were earlier."

Mr. FLETCHER, who dwells at length upon the question of the coordination of secondary with elementary schools under the American system, says:

> A very valuable seedtime in a boy's life is lost. The ordinary boy of 12 is quite capable of facing the difficulties of Latin or geometry, and if he does not do so his mind does not develop as it should if he is going to be fit for serious intellectual study later on. I concluded that for high school and university purposes the time spent in the last two grades in the elementary schools is worse than wasted. Whether the fault lies in those two grades themselves or lower down, I do not know, but it seemed pitiful to see great boys and girls of 14 and 15 doing work fit only for children of 11 and 12.
>
> It is quite clear that the American system does not solve the question of coordination. By preventing overlapping it merely ignores the difficulty, and until the difficulty is fairly met it will remain a serious impediment to really good work.

He refers to various attempted corrections of the difficulty which came under his observation, but expresses the opinion that the only one so far successful is the plan adopted at Newton, Mass., for introducing Latin into the upper grades of the elementary schools.

Coeducation and the excess of women teachers in the secondary schools of this country were features of special interest to members of the commission as differing radically from the policy pursued in English secondary schools. The opinions with respect to these features, expressed by several members, are discussed at length in a review of the report of the commission already published and reproduced in Chapter I (pp. 7, 8, 9).

Manual Training and Business High Schools.

On account of the purpose that Mr. Mosely had in view in organizing the educational commission, manual training and business education were matters that invited the special attention of the members. With respect to manual training in the elementary schools the general opinion of the commission is well expressed in the joint report cited (p. 19). The manual training high schools, which were recognized as a feature peculiar to our system, one which, to quote Mr. Heape, "obtains in no other country," excited widely different opinions on the part of the commission. The following citations may be taken to represent the extremes of criticism and commendation expressed in the various reports.

From report by Mr. Fletcher (p. 143):

The claim is made by enthusiastic supporters of the system that the general effect of this work on a boy's moral and intellectual development is so good—his attention and interest being quickened and his standard of performance so raised by work which itself compels care and accuracy—that he does as much general academic work in his half week as the ordinary high school boy does in his whole week. The claim seems to me extravagant, and certainly in the school where it was made most emphatically I saw some of the worst work in mathematics and language that I saw in the States. A remark of one very thoughtful superintendent of schools seemed to me to have much justice—that the chief justification of the advanced machine work was its effect on the ratepayer who likes to see that he is getting something which he thinks substantial for his money. The only real justification I found for the absolute separation of the two types of school was that often manual work would have had no chance of a fair trial in an ordinary high school where the principal was quite out of sympathy with it. The separation seemed to me on the whole distinctly unfortunate for both schools, robbing boys in the one of all chance of development along lines suitable to them, and leading to an exaggerated stress being put on its value in the other, besides very possibly tending to the development of class distinction between the schools. My own feeling was rather confirmed by what I saw and by the opinions of the more thoughtful men I met, that it is better to have a moderate amount of such work—compulsory perhaps in the lower classes, optional in the higher—in all schools, and to leave work needing elaborate mechanical equipment to professedly technical schools. The present system has had also the effect of stereotyping the work on rather narrow lines, and tending to turn out an excessive proportion of mechanics—especially unfortunate if, as is alleged to be the case, these mechanics have learned methods which they subsequently have to unlearn.

Mr. Heape, who was particularly impressed with the admirable equipment of the manual training schools, as well as with their educational results, says in part (p. 208):

There is frequently a forge shop with some 20 forges; pattern making is taught, and there is a foundry in which sometimes lead or white metal is used, but in others there is a furnace for iron. There is usually a splendid equipment of woodworking benches, with a separate set of tools for each boy, and a large number of lathes for wood turning; also a mechanical engineering workshop fitted up with a variety of lathes, drills, planing, milling, and other machines. There is also a good school of art. Sometimes as much as ten hours per week are given to manual training.

The principals are most emphatic in expressing their belief in the educational value of the work, stating that the boys learn such subjects as geometry and algebra much better from realizing their value and importance, and that in general they easily "forge ahead" of other boys. The boys are all most keen at their work, and it is constantly urged that if you in the workshops secure keenness and persistence of method these qualities do not stop in the shop, but are carried into all the other work of the school. The educative value of the manual work in itself is valued very highly; it means care, forethought, reason, judgment, patience, exactness.

These schools carry manual training much further than is generally considered necessary to get the full educational value from the training of the hand and eye. They have a distinct engineering trend; no fewer than 70 and 90 per cent of the boys leaving from two of these schools go into manufacturing works of some kind. The boys graduating at one of these schools get credit for three years out of a four years' apprenticeship. That all this preparatory and specialized educational hand work is having a marked effect upon industrial progress can not be doubted.

The writer directed his attention specially to this subject, and it does seem to him that its importance deserves and should receive earnest consideration, with a view to

the modification of the methods now in use in the public elementary schools of this country. The principles underlying the teaching of kindergarten and of the subsequent early grades, really that the child should progress much as the race has done, the association of educational hand work with the curriculum of the school up to probably the age of 16—these principles, thought out and adapted to our own requirements, seem to offer a means of counteracting the present tendency of our elementary school system to produce boys with no initiative or self-reliance, and with no desire to continue their education any longer than it is forced upon them (pp. 205–208).

Mr. Reichel, who devotes a large part of his report to this subject, sums up his opinion as follows (pp. 285–286):

General conclusions on manual training in America.—1. Manual training in American schools derives its strength from two independent motives:

(*a*) The educational working up from the kindergarten.

(*b*) The professional working down from the technical colleges.

The great preponderance of opinion both among educationists and industrialists is in favor of making it in some form or other universal in the elementary and secondary schools.

2. The light work done in the four lower grades of the elementary school (6 to 10) is a development of kindergarten work.

3. The bench woodwork done in the upper grades is in the main either Swedish sloyd or based on the same general principles.

4. The manual course in the high school is largely technological, and based on the Russian trade-school work exhibited at the Philadelphia Exhibition in 1876. The system has life and vigor, and produces results of immediate vocational value, but unless carefully watched is apt to fill up the pupils' mental horizon with the fascination of mechanical detail. For this reason, as well as for economy, some educationists advocate the elimination of the machine-fitting work of the fourth year. In some high schools there is also a movement to make the manual work more definitely educational by correlating it with the art department and with the teaching of mathematics.

5. This division into educational and technological has psychological justification. As an instrument of brain development the value of manual training ceases about the age of 15 or 16, or shortly after entrance on the high school course. Up to this point, therefore, it should be treated as part of the general education prescribed for all; from this point on it should form part of a specialized professional training.

6. Actual trade work is not a good form of manual training for promoting brain development, because it seeks to cultivate manipulative skill to the automatic point, and when work becomes automatic it ceases to require mental effort.

7. At the same time, trade work has a special value of its own for the formation of moral habits and the building up of character, particularly in the case of pupils of inferior intelligence and morale.

8. Such distrust of manual training as exists seems rather a survival from the traditions of an older curriculum than a living educational force. It is intended precisely where educational investigation is most scientific and profound (viz, in the education departments of such universities as Harvard, Columbia, and Chicago) that belief in its value is most absolute.

9. The movement in favor of manual training so universal in the State schools is beginning to make itself felt in the private schools in which the sons of the well-to-do are prepared for the older universities.

10. Though manual training tends to become universal in the States, there is no movement in the direction of a technical school, pure and simple, without the culture element. The manual training high school has a strong culture side, and even technical institutes like the Massachusetts Institute and the Armour Institute at Chicago, though their students have been through high schools, insist on a study of language and literature throughout the course.

An unrelieved technical course, it is felt, would at best produce a mere worker, not a citizen, and not the best kind of worker either.

The subject of commercial education was assigned to Mr. Thomas Barclay, formerly president of the British Chamber of Commerce in Paris. His report deals with the matter in a general way, readers being referred for details pertaining to the organization and conduct of commercial studies in this country to the report of President James,[a] prepared for the Paris Exposition of 1900, and to the monograph by Mr. Hartog.[b]

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[a] Monographs on education in the United States, edited by Nicholas Murray Butler, president of Columbia University.

[b] Special Reports on Educational Subjects, edited by Mr. Michael Sadler, for the Board of Education (England), vol. 2.

The special value of Mr. Barclay's report consists in its relation of the particular subject to the general trend of American life, and the comparisons which are made between American and European conditions. On account of the integral unity of the whole discussion, it is difficult to convey a fair idea of its tenor by citations. The following citation, however, is of special interest, as expressing a just estimate of general, in contrast with special, education.

There is no problem of commercial education, in the sense in which we understand it, in a country where practically everybody will probably enter a career of commerce or industry. Nor is there any such thing known in the United States as fixing a child's future in its tender years. The American social idea is to give the child all the education he or she can use. The boy who feels his fitness for any particular career is provided with the means of obtaining the training for it, and is not in any way dependent for obtaining it upon his parents' means. The British mind must at once disabuse itself of the idea that Harvard and Yale are educational centers for the seventy or eighty millions forming the population of the United States. They are only two universities which have more or less resisted the democratic tendencies of the New World. Every State of the Union has its own universities and colleges, and is working out its own problems, the foremost of which is to bring every branch of education within the reach of everyone without distinction of fortune. So much is this felt to be an essential factor in the prosperity of the country that its richer citizens are not only expected to give but do willingly give a large proportion of their millions to promote this object.

Out of these facilities for obtaining higher education has grown the only real American problem in connection with commercial education; the problem of what is the proper age for a young man to enter business, and of whether a college education—that is, an education which absorbs a young man's life from 18 or 19 to 21 or 22 years of age—is a desirable addition to the mental and moral equipment fitted for a commercial career, or whether secondary education suffices.

I have had rather exceptional opportunities during my four months' stay in the United States of ascertaining the opinions of Americans generally on educational questions—I mean, of Americans not delegated specially to give enlightenment—and I have made a point of knowing the views of as many business men as possible in regard to education. I may say at once that the idea of specializing for business purposes at school is not current among business men. The only business education that the American business man, so far as I have been able to ascertain, approves of is that given in so-called business colleges - special training schools in which lads, having received a high school or secondary education, are rapidly taught a number of matters of routine and conventional knowledge which dispense with the loss of time caused by "rawness" in the apprentice. I venture to say that anything so perfect as Packard's College in New York, which has no pretense to do more than this, does not exist elsewhere. All are agreed that high school or secondary education should be made as practical as possible. The reports of my fellow commissioners on this subject will show how this requirement is being met. There are several secondary schools which are called commercial high schools. Their programmes are simply those of the ordinary high schools with a little specialization in some branches for the requirements of business. The differences might be adopted by all secondary schools with advantage in a practical age like our own.

The question of whether a college career is desirable in addition to the secondary education which every American citizen considers indispensable is one upon which there is divided opinion. Assuming that a boy gets a good mental discipline by 18 years of age, most business men, however, seem to think that a college education, with its necessarily more or less relaxed personal discipline and its more or less speculative studies, directs into unpropitious currents the most adaptable years of a young man's life, and that a boy of 18 entering business can more rapidly and efficiently adapt himself to its requirements than, as an American said to me, the "top-heavy" young college men of 22. On the other hand, in actual practice most rich business men send their sons to college. This is, of course, explained by the social advantages a college education procures for a young man outside his business, and in many cases it provides what the self-made father may have personally felt the want of. This question, however, has not much practical interest for Englishmen, who will mostly agree to the proposition that three years spent at Oxford or Cambridge do not fit a young man for a commercial career, except that it opens up a lateral question affecting all educational comparisons, viz, the age at which young men of different nationalities reach the same intellectual footing. Here I have had the benefit of the experience of Professor Münsterberg, of Harvard University, who contends that the young American is two years behind the young German, the latter leaving school at 19 on the same mental

level as the young American at 21. My own experience is that this is the case as between the young Scotsman and the young Englishman, the former also being about two years ahead of the latter. I have accounted to some extent for the difference in the case of Americans. The explanation of the backwardness of young Englishmen is, no doubt, due to the bad methods of instruction in English schools, and especially to the excessive attention bestowed in them to sport. Other members of the Mosely Commission will probably deal with these defective methods. A number of American educationists are endeavoring to strengthen the mental discipline of secondary education with a view to enable the American, like the German and Scotch boy, to begin his bread-earning work or studies, whatever they may be, at 18. I commend this to my fellow-countrymen, and would suggest that the objects of teaching Latin as training for the imagination, of Greek as an enlargement of the mental vision, of mathematics as promoting concentrated reasoning, of grammar and literature as a discipline in accuracy and precision, are lost sight of in our higher secondary education, which has set itself altogether wrong ideals through a mistaken view of examinations.

When we get closer to Americans, we see that, in spite of all their apparent superficiality, their schools are turning out more active, business-like, hard-working, enterprising young men than either the English or the German schools—young men with greater ambition and self-reliance and a greater capacity for development, equally courageous in work, and more sober in their lives, with a higher sense of industrial integrity, an all-round greater pleasure in effort, and better humor in adversity.

Higher Technical Education.

The higher orders of technical education as maintained in the United States were dealt with particularly by four members of the commission, specially chosen for this subject by reason of their relation to corresponding institutions in England and their reputation as experts. Their reports well repay careful and thorough study; here it is impossible to do more than present a few extracts covering opinions and comparisons of greatest importance.

Professor Ayrton, who occupies the chair of physics in the city and guilds of London Institute and is past president of the Institution of Electrical Engineers, devoted his time in this country almost entirely to the study of the educational facilities offered to electrical engineers. Professor Ayrton was particularly impressed with the "close bond of union between the industry and the teaching," as offering a striking contrast with conditions in England.

Everywhere I was told [he says] an engineering apprentice in a factory should be a college-trained man; an engineering professor in a college should be actively engaged in the practice of his profession.

He emphasizes the relation by special reference to the policy pursued at the Westinghouse electric and manufacturing works at Pittsburg and at the General Electric Company's works at Schenectady.

In common with his colleagues Professor Ayrton was impressed also with the advantage that this country possesses in its freedom from the system of "outside examinations" which in England seriously handicaps both student and professors.

In America [he says], much less importance is attached to examinations than in Great Britain. Whether a student is worthy of a degree is left to the decision of his professors without the intervention of outside examiners. They are greatly influenced, they told me, by their estimation of the value that the student would be to the world. On the other hand, America's judgment of a professor is based on his power of attracting students, on the demand shown by the industry for the men he turns out, and generally on the name he makes for his college.

Mr. Blair, assistant secretary for technical education of the department of agriculture and technical instruction, Ireland, agrees with Mr. Ayrton as to the importance of the close relation maintained by our institutions between technical education and the industries to which it pertains.

Mr. Blair's report is of special interest because of the insight it affords into the general system of technical education that has been developed in England, and the companion

of the same with our own system and with that of Germany. This portion of his report is here quoted in extenso:

"The British system," he says, "has developed under acts of Parliament which define the expression 'technical education.'" The definition as he notes excludes "the teaching of trades."

These acts [he continues] allowed the inclusion of subjects other than those named in the definition, if approved and "minuted" by the central authority. The authorities, local and central, responsible for technical education being responsive to public opinion, subjects following the lines of the popular interpretation have from time to time been added, and highly ingenious arguments have been multiplied to show that trades were not being taught. The "last ditch" of the defense may be stated somewhat thus: Under industrial conditions the worker's operations are restricted in number and character in such a way that he must not only have the requisite skill to carry out the operation, but must repeat the operation so frequently that he tends to become a part of the machine—although a self-adjusting part, such as mechanical engineers have not yet been able to make out of wood or metal. Technical education, on the other hand, it is argued, promotes an opposite tendency in the individual; it affords opportunities for increasing the number of his operations, thus helping him to acquire manual skill of a more diversified character; and it also gives him the underlying theory of tools, materials, and processes. Such a view, added to the funds available for promoting it, has produced a British system of evening schools without parallel anywhere. I have seen the German evening school system and the American evening school system, and neither is comparable with ours in quantity or in quality. German and American educationists have a very high opinion of our British evening schools, but they look upon them as trades schools—institutions for the training of highly skilled operatives. Such is not a wholly incorrect view. Germans and Americans point with no unnatural pride to their Charlottenburgs and their institutes of technology, and not being able to see similar institutions with us they form a poor estimate of our system of technical education. They have "sized up" all our evening schools as mere trade schools. They do not see that most of our able and ambitious young men and young women are to be found in these institutions adding a school evening to a workshop or counting-house day; they do not realize, and frequently we ourselves have failed to realize, that we are in the main trying to do in one institution—the evening school—what Germans and Americans are in the main endeavoring to do in two. In other words, they separate more clearly than we do the education of the "hands" and of the "heads." The complaint as to want of preparation of our evening technical students is, to a considerable extent, evidence of this analytical defect in our educational authorities; not being clear in our aims we are confusing the issues and are endeavoring to do too much with all the raw material placed at our disposal; we are endeavoring to use the same process for the production of both "heads" and "hands," and are too apt to apply the standard for "heads" to the recruits for "hands." Britishers have held on somewhat tenaciously to the belief that leaders are "born, not made;" they have trusted to the native ability of the "lad o' pairts;" and they expect him by sheer force of character to learn his trade, attend the technical school, and fight his way to the top of his business or profession.

It will be observed that in referring to the two processes, I have said "in the main" on both sides; for I am not overlooking our day technical institutions on the one hand, nor on the other that the American "lad o' pairts" does "come through" by sheer force of character and ability, and with the aid only of evening technical schools, as ours do. I contend, however, that in the reservation "in the main" I have sufficiently allowed for the exceptions.

A few figures will corroborate my statements. In 1901 the total number of British day students of technology was 3,873. Of these 2,259 were engineering students. (See Record of Technical and Secondary Education, Vol. IX, No. 45, p. 54.) In the nine German technical high schools (day institutions), there were 14,986 students in 1902 (see p. 49 of Report by Doctor Rose); and in the scientific colleges and schools of technology (day institutions) of the United States in 1900 there were : Students of agriculture, 2,852; of mechanical engineering, 4,459; of civil engineering, 3,140; of electrical engineering, 4,459; of mining engineering, 1,261; making a total of 14,267 students in addition to 10,925 students of general science courses (university and technological), including applied chemistry. (See p. 1,875, United States Commissioner's Report, 1901.) In Charlottenburg alone there were 3,428 day students in 1899 and 4,194 in 1902; in the Massachusetts Institute of Technology, Boston, 1,608 day students in 1902–3; and in the same year Sibley (scientific and engineering) College of Cornell University had 886 day students. The numbers become even more significant when

it is realized that the British totals include all day technical students of fifteen years of age and upward who were taking a complete day technological course of not less than 20 hours per week; and that the schools contributing to these numbers varied from those of university standard, requiring a good general education as a preliminary, to technical schools for which the only preliminary was an elementary school education. On the other hand, the German students are not admitted until they are 18 years old; and the statistics of the Massachusetts Institute of Technology, Boston, which in this respect may be regarded as fairly typical of the United States institutions, contrast favorably with ours. In 1902–3 22.5 per cent of the Boston students were between 16½ and 18 years of age; and 77.5 per cent were over 18; none were below 16½ and almost 15 per cent were over 20. The German and American students as a whole have had a much better preparation than ours; they show their high-school (leaving) certificates as admission cards. These figures fully support my view that German and American leaders on the one hand and British on the other are prepared in different ways—the American and the German mainly in day schools, the British mainly in evening schools. There are, of course, other factors, but I am dealing only with the educational (pp. 40–42).

As regards the classes of institutions considered, Mr. Blair's report is exceedingly comprehensive, including trade schools, secondary and higher technical schools, and commercial schools. The general effect of his observation in this wide and varied field was to convince him that—

> the American school system, past and present, has not been a large determining factor in the success of American industries and commerce. Such success was due, in the first place, to the virile and enterprising character of the American people—characteristics not developed by education in the narrow sense of the schools, but by education in the wider sense of the effect on the American people of two centuries of pioneering in a vast and rich but undeveloped though not uninhabited continent; in the second place, as in the United Kingdom and in Germany, to great individuals—Carnegies, Whitworths, Krupps; and, in the third place, to the constant contribution to the citizenship of the United States during the middle half of the nineteenth century of much excellent human material from the United Kingdom, and, in a less degree, from the other countries of Europe.
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> But the visit has also produced a strong impression that the future industries and commerce of America are being directly and profoundly affected by the schools of to-day. The last quarter of a century has witnessed everywhere a general process of aggregation in trades, businesses, and industries. The area of operations of these centripetal economic forces is larger in the United States than anywhere else, and it is believed that the only limit to aggregation is the want of men capable of managing the resulting combinations. Further, in addition to the need of capable managers of these organizations, the scale of their operations has often demanded their direction from a distance through subordinates, and that, too, not only on the result of personal observation, but on evidence supplied by reports of subordinates. Able lieutenants have become essential. Urged on by the necessity for quick multiplication of such officers, and guided by the instinctive boldness of Americans in trying new methods, the great industrial and commercial firms are abandoning the traditional methods of waiting for apprentices to "come through," and are attempting to manufacture the junior officers, by a rapid process, out of college graduates in technology and commerce. Furthermore, the lads who came through by the traditional slow process had plenty of will and forcefulness, but the play of forces on them, while emphasizing these natural characteristics, did not, as a rule, provide sufficient opportunity for the development of intellect—grasp, judgment, ability to apply general principles to details. Such men could, in fact, apply rules, but not the principles on which the rules were founded. * * *
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> In the earlier part of this report I endeavored to set out a few of the features of technical education in America, dealing chiefly, and perhaps at too great length, with the methods of preparing the "captains of industry." Further on I attempted to show how this method of preparation is appreciated, and to indicate that the relationship between the schools and the industries has become one of supply and demand. It has also been explained that the quality of the supply is good, because the schools understand that they are professional schools, and that their graduates must be as capable of entering into practice as are graduates of medical colleges. A word in recapitulation may not be out of place.
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> The American plan involves an elementary school course until 14 years of age, four years at a high school, four years at a college or institute of technology, where instruction is industrial and not academic in character, and two years as an industrial cadet. In the schools there is no system of prize giving or ranking to misdirect the mind of

the youth from the real objective of his preparation. No premium is required of this youth on entering a "works." On the contrary, he is eagerly sought after, the managers believing that the future of their "works" depends on their ability to secure him. The pay is small—barely sufficient to live on. A young man will be 25 before he obtains a responsible post and be in a position to earn a fair living. After that, however, promotion is rapid and prospects are great for the able and ambitious. The best ability in the States is to be found not in the professions and in politics, as with us, but in industries and commerce, partly the cause and partly the consequence of present conditions.

Compare this with the British plan. The number of students in British day technical schools is insignificant when compared with the American figures. Further, our day technical course is of three years' duration only; and, as a rule, it is not based on a good general education of a secondary standard. The schools are not as professional in character as they might be, and the youth when he has received his diploma is somewhat diffident as to his capacity to tackle industrial problems. Further, he has great difficulty in securing a trial in a good firm, our industrial leaders having little or no faith in this kind of man. These features, the kind of product and the want of faith, react against each other; in other words, there is no supply and demand. The usual means of entrance of prospective leaders into British works is the payment of a premium; and the premium boy usually goes into works at 16 or so instead of going to college. This boy spends five years going round the workshops and the drawing office; he is not taught principles; that instruction has to be obtained at the evening technical school, or, in some rare cases, by a full three years' course at a technical school subsequent to his pupilage in the works. The premium is in most cases a perquisite of the high office to whom the pupil is attached.

There is also the case of the regular apprentice who pays no premium. This boy if very able, very ambitious, and very strong physically, may succeed in reaching a post of responsibility; his aid is the evening technical school. In some rare cases he is successful in securing the assistance of a Whitworth Exhibition and that brings instruction of a college standard.

Are we not asking too much of our youth? Let us take the case of a premium boy who leaves school at the age of 16 or 17 and has become a pupil in some engineering firm. He is out of bed soon after 5 a. m.; into the works at 6; he leaves the works at 5.30 p. m.; he is at the technical school or studying at home on five nights per week from 7 to 9.30 or 10, and he is back to bed again at 10 or 10.30. On Saturday afternoon, the strain being over, he falls asleep in his boots. This hard work lasts from the end of September to the middle of May; and the 6 to 5.30 lasts all the year round. Are we not putting an unnecessarily severe strain on our very best material? In these days of international and industrial rivalry can we afford to allow the "lad o' pairts" to sacrifice so much to the process of "coming through?" He will succeed in spite of obstacles; but he ought to reach the top with strength and facilities unimpaired; stronger not weaker from the ordeal.

Our plan of training leaders is distinctly inferior to the American; indeed, we are not making the most of one of our most valuable national assets—the character and ability of our youth. And one of the most serious obstacles is the method of paying high officers! If we thus handicap our youth and do not make the best use of our national energy, then our industries will not compete on equal terms with those of America; for in natural resources, other than men, America has more valuable assets than we.

This report has already reached too great a length; and it is impossible now to deal with technical schools other than those already referred to, and with the possible applications to our own system of some of the features of American education.

It will be sufficient to add that the general effect of my inquiry has been to confirm views previously held:

1. That the problem of technical education is not a side issue, but an integral part of the problem of education.

2. That the solution of the problem of technical education, as of that of education, will be partial and incomplete unless the problem is attacked from the psychological as well as from the industrial and commercial point of view.

3. That the establishment of a close connection between institutions for technical education on the one hand and industrial and commercial organizations on the other is an essential factor in a successful solution of the problem of technical education as of that of industrial and commercial progress (pp. 61–63).

MR. RIPPER, professor of engineering in University College, Sheffield, dwells particularly upon the advantage which this country possesses over England in the "senior and better trained type of student in the technical colleges."

The students of the technical colleges in America, being from 18 to 25 or 26 years of age, and having received a high school and in some cases a college education, it is possible to do much superior work with them than with younger boys. The younger student has generally not received the necessary mathematical training to enable him to do advanced work, he has not a sufficient sense of responsibility in approaching his work, and he does not realize the importance of the issues with which he is dealing, nor the necessity for the strictest accuracy in his work. On the other hand, with a senior type of student there is more strenuous application and earnestness, the work is handled in a different spirit, and very much sounder and more thorough training may be given. In America at the present time the colleges are filled with students of a senior type, who are receiving an advanced and thoroughly sound training, and it is business concerns led by these men with which the British manufacturer will have to compete. The question for our country to ask itself is: Are we preparing the British youth of to-day to compete successfully with his commercial rival? It must be confessed that, so far as the study of science as applied to industry is concerned, our position at present is inferior to that of America.

Mr. Ripper gives details of the system of training apprentices adopted by the Baldwin Locomotive Works, Philadelphia, but expresses the opinion that the "general practical training obtained by the apprentice in British workshops is unequaled in any other country."

DR. MAGNUS MACLEAN, professor of electrical engineering in the Glasgow and West of Scotland Technical College, was particularly impressed with the attitude of employers in this country toward technically trained students.

In Britain [he says], owing partly to class and caste distinctions which do not hold to the same extent across the Atlantic, the impression has got abroad that education only spoils the common workman and unfits him for his industrial position. Manufacturers and managers generally seem to look with disfavor upon highly educated youths and college men. At least, they give no preference or encouragement to this class over their more ignorant rivals, and consequently the youths themselves, finding no advantage in remaining long at school or college, leave early, ignoring the benefits of a knowledge and training which seem to carry them no further forward in the actual business and trade of life.

The attitude in the States I found to be exactly the opposite of this. So far from disparaging education, the American regards it as the chief national asset, and strains every nerve to render it as widely diffused as possible, convinced that the increase of intelligence thus fostered will be a common gain. The educated youth will not only make a better citizen, but he will outstrip his more ignorant fellow in industrial efficiency, and in the long run leave him far behind. The conditions of American life have not permitted her people to ignore so obvious a fact. There are circumstances and forces, as I have indicated, which have thrust upon them more peremptorily than upon us recognition of the value and necessity of education. Besides the economic fact that the development of the material resources of the country demands the best available intelligence and skill, there are the social and political factors. The nation is a democracy very pronounced in its view of personal rights and personal liberty, and if it is to govern itself wisely, it must make sure, as far as possible, that its members, drawn as they are from all nationalities, are sufficiently welded together and enlightened to make intelligent and safe use of their voting privileges. Widespread popular ignorance would be a constant menace and danger to the stability of the State, as well as to the industrial interests.

In consequence of this more enlightened view of education, manufacturers and employers of labor are more ready to recognize the superiority of the trained student over the untrained artisan, and are everywhere eager to get technically trained men to direct their work; they show their interest in, and appreciation of, learning by founding and equipping institutes and colleges for the technical training of young men in the various industries, and they further encourage all such institutions by giving the college-trained youths a preference over those who are merely shop trained.

"In all departments where high-class work is done," said one employer, "we pay good wages, and are always anxious to get technical men. They are broader minded and have a wider mental grasp than the man who left school at the age of 16 to learn his trade in a shop. In technical or any other kind of work, the young man who has

been trained in a technical school very soon overtakes and outstrips the man who has had practical experience only. Their remuneration at first is no greater than that of the others who do similar work, but in almost all cases it increases more rapidly, and there is practically no limit to their promotion, while the man without technical education, unless in exceptional cases, finds his field of operations greatly restricted."[1]

I was told on several occasions that ten years ago manufacturers would not take college men; now they prefer them, because they can tackle new problems. Manufacturing processes are constantly developing, and there is room for men with new ideas. The cost of construction and commercial value of a machine must be taken into consideration when it is being designed, and the man whose technical training has been supplemented by practical experience in the shop is better fitted to handle these questions than one who has had only a shop training.

Finally is noticed here the profound impression made upon different members of the Commission by what is being done in America for higher agricultural education. The policy of the land-grant colleges and the experimental stations is described at length and the relation of the latter to the Agricultural Department at Washington enthusiastically commended.

The most striking illustrations of American organizing ability (says Professor Armstrong) are to be met with at Washington. So far as I am aware, there is nothing anywhere to compare with the way in which science is being utilized in the service of the State by the United States Department of Agriculture, which is located in the capital. * * * The Department is not merely an office—it is also a busy hive of research. A large number of laboratories are attached to it, in which investigations are being carried on, bearing, in one way or another, on problems in agriculture. Much research work is also done in the State Experiment Stations; in the main, however, these serve to bring under the notice of farmers the importance of science to agriculture by demonstrating the value of methods of cultivation, manures, etc. There is no question that the research work done under the auspices of the Agricultural Department and in the experiment stations is of the very greatest value and is contributing most materially to the development of agricultural industry. To take only one illustration, whereas, in 1884, the amount of sugar made from sugar beet was only about 300 tons, the beet crop of the past year is estimated to yield 400,000 tons, the amount of sugar made in the United States from the sugar cane being only about 300,000 tons. This extraordinary increase, I believe, is due practically entirely to the influence exercised from Washington. * * *

The Department is undoubtedly exercising an extraordinary influence on the education of farmers by distributing literature among them and by encouraging and helping them in every possible way; indeed, it is certain that, by one means or another, the American farmer is gradually being led to see that science is indispensable to agriculture.

Professor Armstrong describes also at some length the work that is being carried on in New York State under the direction of Professor Bailey, the director of the College of Agriculture at Cornell University, Ithaca, by means of circular letters issued to farmers, by plans for the improvement of school playgrounds, and by the "formal organization of junior naturalist clubs in schools throughout the State."

Spirit of American Systems of Education.

The reports on higher education in America, as represented in universities, must be passed over here with mere mention. They are, however, among the most suggestive reports in the collection, because of their constant reference to the conditions of university education in Great Britain and their emphasis upon what may be called the American type as represented in State universities like those of Michigan and Wisconsin.

Considering the whole range of their observations it appears that our foreign critics were more deeply impressed with the spirit in which our schools and higher institutions are maintained and conducted than with their actual methods and scholastic results. This survey may, therefore, well close with extracts from the reports of two members who most fully reflect this general impression. The Rev. T. L. Papillon,

M. A., formerly fellow and tutor of New College, Oxford, concludes a very comprehensive survey of the educational work of the United States as follows:

To sum up what has struck me most forcibly in a short and imperfect survey of a wide field, is, first of all, the attitude of the American people toward public education as a prime necessity of national life, for which hardly any expenditure can be too great; and next, its eminently practical and popular character. There is more coordination of its successive stages than we have hitherto seen in England. From the elementary school to the high school, from the high school to the university, and on to special professional training, the education of the future citizen is in theory, and to a large extent in practice, a continuous whole, marked out and provided by the State. Opportunities for secondary and technological instruction are more widely diffused and more generally accessible than can at present be said of our own country, though, as I have intimated, neither the methods of teaching nor the standards of attainment are, as a rule, superior to ours. The educational systems of America have the merits and defects of much else in that great but as yet unfinished country. They are full of life and energy; freely, not to say rashly, experimental; innovating, renewing, abandoning, sacrificing, now one point, now another, whether of ideas or practice, in the effort at growth and development. They are less systematically and scientifically thought out beforehand than the more symmetrical systems of continental Europe; but they are, perhaps, for that very reason more suggestive to ourselves, to a free people feeling its way along the same road, and realizing, as we are beginning to do, that it is not by transplanting the ideas and methods of other nations, but by improving or creating our own, that England must work out its educational salvation (p. 255.)

JOHN RHYS, Esq., professor of Celtic and principal of Jesus College, Oxford, shows a keen appreciation of the democratic spirit of our institutions, of their spontaneous energy and their flexibility. While pointing out many defects noticed by him in the class exercises at which he was present, he finds much to commend even in this respect. "The average of the teaching," he says, "was good, and some of it I should call excellent."

I was greatly impressed by the deliberate manner in which it was carried on with nothing to hamper the teacher in his work or incite him to undue hurry. So I am convinced that what American education has already achieved is but a very inadequate earnest of what it is going to do. The machinery is there in perfect order, and, if I am not greatly mistaken, more and more thoroughness will be secured in the working of it, and the crudeness occasionally to be detected will be eliminated. An American who understands the character of his countrymen well places to the credit of that character alertness and adaptability, and against it a lack of thoroughness; but that lack must be a far greater and deeper one than I take it to be if American educationists do not succeed in making an impression on it by improvements in the direction which I have indicated, and that in the immediate future.

CHAPTER III.

STATEMENT OF PROCEEDINGS INSTITUTED TO EXECUTE THE RHODES SCHOLARSHIP TRUST.

INCLUDING LIST OF STATE COMMITTEES OF SELECTION, THE EXAMINATION PAPERS SET FOR 1904, AND LISTS OF AMERICAN RHODES SCHOLARS.

The educational provisions of the will of Cecil Rhodes were given in the Annual Report of this office for 1901, Volume 2, chapter 47 (pp. 2447–2450). The sections more immediately relating to the American scholarships are as follows:

* * * Whereas I also desire to encourage and foster an appreciation of the advantages which I implicitly believe will result from the union of the English-speaking peoples throughout the world, and to encourage in the students from the United States of North America, who will benefit from the American scholarships to be established, for the reason above given, at the University of Oxford under this my will, an attachment to the country from which they have sprung, but without, I hope, withdrawing them or their sympathies from the land of their adoption or birth: Now, therefore, I direct my trustees as soon as may be after my death, and either simultaneously or gradually, as they shall find convenient, and, if gradually, then in such order as they shall think fit, to establish for male students the scholarships hereinafter directed to be established, each of which shall be of the yearly value of £300 and be tenable at any college in the University of Oxford for three consecutive academical years. * * *

I further direct my trustees to establish additional scholarships sufficient in number for the appropriation in the next following clause hereof directed, and those scholarships I sometimes hereinafter refer to as "the American scholarships."

I appropriate two of the American scholarships to each of the present States and Territories of the United States of North America, provided that if any of the said Territories shall in my lifetime be admitted as a State the scholarships appropriated to such Territory shall be appropriated to such State, and that my trustees may, in their uncontrolled discretion, withhold for such time as they shall think fit the appropriation of scholarships to any Territory.

I direct that of the two scholarships appropriated to a State or Territory not more than one shall be filled up in any year, so that at no time shall more than two scholarships be held for the same State or Territory.

CONDITIONS.

My desire being that the students who shall be elected to the scholarships shall not be merely bookworms, I direct that in the election of a student to a scholarship regard shall be had to (1) his literary and scholastic attainments; (2) his fondness of and success in many outdoor sports, such as cricket, football, and the like; (3) his qualities of manhood, truth, courage, devotion to duty, sympathy for the protection of the weak, kindliness, unselfishness, and fellowship; and (4) his exhibition during school days of moral force of character and of instincts to lead and to take an interest in his schoolmates, for those latter attributes will be likely in after life to guide him to esteem the performance of public duties as his highest aim. As mere suggestions for the guidance of those who will have the choice of students for the scholarships, I record that (1) my ideal qualified student would combine these four qualifications in the proportion of three-tenths for the first, two-tenths for the second, three-tenths for the third, and two-tenths for the fourth qualification, so that, according to my ideas, if the maximum number of marks for any scholarship were 200 they would be apportioned as

follows: Sixty to each of the first and third qualifications and 40 to each of the second and fourth qualifications; (2) the marks for the several qualifications would be awarded independently as follows (that is to say): The marks for the first qualification by examination, for the second and third qualifications, respectively, by ballot by the fellow-students of the candidates, and for the fourth qualification by the head master of the candidate's school; and (3) the results of the awards (that is to say, the marks obtained by each candidate for each qualification) would be sent as soon as possible for consideration to the trustees or to some person or persons appointed to receive the same, and the person or persons so appointed would ascertain by averaging the marks in blocks of 20 marks each of all candidates the best ideal qualified students.

No student shall be qualified or disqualified for election to a scholarship on account of his race or religious opinions. * * *

A qualified student who has been elected as aforesaid shall, within six calendar months after his election, or as soon thereafter as he can be admitted into residence, or within such extended time as my trustees shall allow, commence residence as an undergraduate at some college in the University of Oxford.

The scholarships shall be payable to him from the time when he shall commence such residence.

I desire that the scholars holding the scholarships shall be distributed among the colleges of the University of Oxford, and not resort in undue numbers to one or more colleges only.

Notwithstanding anything hereinbefore contained, my trustees may, in their uncontrolled discretion, suspend for such time as they shall think fit, or remove, any scholar from his scholarship.

Annual Scholars' Dinner.

In order that the scholars, past and present, may have opportunities of meeting and discussing their experiences and prospects, I desire that my trustees shall annually give a dinner to the past and present scholars able and willing to attend, at which I hope my trustees, or some of them, will be able to be present, and to which they will, I hope, from time to time invite as guests persons who have shown sympathy with the views expressed by me in this my will.

To carry out the provisions of the will the trustees appointed by Mr. Rhodes, viz, the Earl of Roseberry, Earl Gray, Lord Milner, Mr. Alfred Beit, Dr. L. S. Jameson, Mr. L. L. Michell, and Mr. B. F. Hawkesley, designated Dr. G. R. Parkin, principal of Upper Canada College, Toronto, as their agent, and he forthwith placed himself in communication with the heads of some of the principal universities and colleges in the United States in order to obtain their advice as to the best way of electing candidates to the scholarships destined for students from this country. After personal interviews with these advisers, for which meetings Doctor Parkin visited nearly every State of the Union, it was decided that the most feasible way of electing candidates and the one least likely to give dissatisfaction would be to choose a committee of selection in each State and Territory from the faculties of the leading universities and colleges thereof, which committee should provide for and hold the examinations required by the Oxford authorities in strict compliance with the directions sent to each committee by the trustees, and should decide upon the other qualifications of the candidate required by the Rhodes will. The chairmen of these committees were selected from among the advisers above mentioned, and were usually the heads of the principal universities or colleges of the various States, while the other members of the committees were selected from the faculties of those institutions.

There have been a few changes in the committees since their organization. The following list gives the names of those serving for the examinations of 1905:

Committees of Selection, Rhodes Scholarships.

Alabama.—Chairman: President J. W. Abercrombie, LL. D., State University, University; President C. C. Thach, Alabama Polytechnic Institute, Auburn; President S. M. Hosmer, Southern University, Greensboro; President A. P. Montague, Howard College, East Lake; Prof. W. B. Saffold, University of Alabama, University.

Arizona.—Chairman: President K. C. BABCOCK, Ph. D., University of Arizona, Tucson; Prof. S. C. Newsom, University of Arizona; Prof. F. N. Guild, University of Arizona.

Arkansas.—Chairman: ——— H. S. HARTZOG, LL. D., University of Arkansas, Fayetteville; J. H. Hinemon, superintendent of public instruction, Little Rock; President Stonewall Anderson, Hendrix College, Conway; President J. W. Conger, Ouachita College, Arkadelphia; President E. R. Long, Arkansas College, Batesville.

California.—Chairman: President BENJAMIN IDE WHEELER, LL. D., University of California, Berkeley; President David Starr Jordan, LL. D., Leland Stanford University, Stanford University; Prof. E. C. Norton, dean of Pomona College, Claremont.

NOTE.—Appointments to be made alternately by University of California and Leland Stanford University for six years. Each seventh year the committee appoints from the smaller colleges.

Colorado.—Chairman: JAMES H. BAKER, LL. D., president of the University of Colorado, Boulder; Edward S. Parsons, M. A., B. D., dean of Colorado College, Colorado Springs; Herbert A. Howe, Sc. D, dean of the College of Liberal Arts, Denver University, University Park.

Connecticut.—Chairman: President ARTHUR T. HADLEY, LL. D., Yale University, New Haven. (With four colleagues.)

Delaware.—Chairman: President GEORGE A. HARTER, M. A., Ph. D., Delaware College, Newark; President Woodrow Wilson, LL. D., Princeton University; President Ira Remsen, LL. D., Johns Hopkins University; Provost C. C. Harrison, LL. D., Pennsylvania University.

Florida.—Chairman: President A. A. MURPHREE, Florida State College, Tallahassee; President Andrew Sledd, Ph. D., Florida University, Lake City; President W. F. Blackman, Rollins College, Winter Park; ———, Stetson University, De Land.

Georgia.—Chairman: Chancellor WALTER B. HILL, University of Georgia, Athens; Prof. W. H. Kilpatrick, Mercer University, Macon; Prof. W. L. Weber, Emory College, Oxford; Prof. W. H. Bocock, University of Georgia, Athens.

Idaho.—Chairman: President JAMES A. MCLEAN, Ph. D. (with the faculty), State University, Moscow.

Illinois.—Chairman: President W. R. HARPER, Ph. D., D. D., University of Chicago, Chicago; President ———, Northwestern University, Evanston; President Edmund J. James, Ph. D., State University of Illinois, Urbana; President C. W. Barnes, B. D., Illinois College, Jacksonville; President M. H. Chamberlin, LL. D., McKendree College, Lebanon.

Indiana.—Chairman: President WILLIAM L. BRYAN, Ph. D., State University, Bloomington; President the Rev. A. Morrissey, C. S. C., Notre Dame University, Notre Dame; President William P. Kane, D. D., Wabash College, Crawfordsville; President E. H. Hughes, D. D., DePauw University, Greencastle; President R. L. Kelly, Ph. M., Earlham College, Richmond.

Iowa.—Chairman: President GEORGE E. MACLEAN, Ph. D., LL. D., State University, Iowa City; President D. F. Bradley, D. D., Iowa College, Grinnell; President W. F. King, D. D., Cornell College, Mount Vernon; President S. W. Stookey, Coe College, Cedar Rapids; President H. M. Bell, Drake University, Des Moines.

Kansas.—Chairman: President FRANK STRONG, Ph. D. (with the faculty), State University, Lawrence.

Kentucky.—Chairman: Prof. ARTHUR YAGER, Georgetown College, Georgetown; President J. K. Patterson, Ph. D., State College, Lexington; Prof. S. M. Jefferson, M. A., Kentucky University, Lexington: President Chase Palmer, Ph. D., Central University, Danville; President J. L. Weber, D. D., Kentucky Wesleyan College, Winchester.

Louisiana.—Chairman: President THOMAS D. BOYD, LL. D., State University, Baton Rouge; — —, Tulane University, New Orleans; Prof. John R. Ficklen, Tulane University, New Orleans; Prof. C. E. Coates, Ph. D., State University, Baton Rouge; C. Cottingham, Mount Lebanon College, Mount Lebanon; H. L. Maring, College of the Immaculate Conception, New Orleans; Prof. E. L. Scott, State University, Baton Rouge; J. L. McGehee, Centenary College, Jackson.

Maine.—Appointments to be made in rotation by (1) Bowdoin College, (2) Colby College, (3) Bates College, (4) the State University. Chairman: President CHARLES L. WHITE, Colby College, Waterville.

Maryland.—President IRA REMSEN, LL. D., Johns Hopkins University, Baltimore; President Thomas Fell, LL. D., St. John's College, Annapolis; President Thomas Lewis, D. D., Western Maryland College, Westminster.

Massachusetts.—Chairman: President CHARLES W. ELIOT, LL. D., Harvard University. (With four colleagues.)

Michigan.—Chairman: President JAMES B. ANGELL, LL. D., State University, Ann Arbor; President W. G. Sperry, Olivet College, Olivet; President Samuel Dickie, LL. D., Albion College, Albion; President A. G. Slocum, Kalamazoo College, Kalamazoo.

Minnesota.—Chairman: President CYRUS NORTHROP, LL. D., State University, Minneapolis; President James Wallace, D. D., Macalester College, St. Paul; President G. H. Bridgman, D. D., Hamline University, St. Paul; President M. Wahlstrom, Ph. D., Gustavus Adolphus College, St. Peter; President W. H. Sallmon, Carleton College, Northfield.

Mississippi.—Chairman: Chancellor R. B. FULTON, LL. D., State University, University; Prof. Alfred Hume, LL. D., University of Mississippi; President W. B. Murrah, Millsaps College, Jackson; President W. T. Lowrey, LL. D., Mississippi College, Clinton; President J. C. Hardy, Agricultural College.

Missouri.—Chairman: President R. H. JESSE, LL. D., University of Missouri, Columbia; Chancellor W. S. Chaplin, LL. D., Washington University, St. Louis; President W. H. Black, D. D., Missouri Valley College, Marshall; President ———, Westminster College, Fulton; Right Rev. Daniel T. Tuttle, D. D., bishop of eastern diocese of Missouri, St. Louis.

Montana.—Chairman: President OSCAR J. CRAIG, State University; President ———, Montana College of Agriculture, Bozeman; President N. R. Leonard, Montana State School of Mines, Butte.

Nebraska.—Chairman: Chancellor E. B. ANDREWS, LL. D., State University, Lincoln; President William E. Schell, York College, York; Chancellor D. W. C. Huntingdon, Nebraska Wesleyan University, University Place; President M. P. Dowling, Creighton University, Omaha; President E. Van Dyke Wight, Hastings College, Hastings; President D. R. Kerr, Bellevue College, Bellevue; President George Sutherland, Grand Island College, Grand Island; Prof. L. A. Hoopes, Union College, Collegeview; President W. P. Aylsworth, Cotner University, Bethany; President D. B. Perry, Doane College, Crete.

Nevada.—Chairman: President JOSEPH E. STUBBS, D. D., State University, Reno.

New Hampshire.—Chairman: President WILLIAM J. TUCKER, D. D. (with faculty), Dartmouth College, Hanover.

New Jersey.—Chairman: President WOODROW WILSON, LL. D., Princeton University, Princeton; President Austin Scott, LL. D., Rutgers College, New Brunswick; Prof. Henry Burchard Fine, Princeton University.

New Mexico.—Chairman: WM. G. TIGHT, Ph. D., with the faculty, University of New Mexico, Albuquerque.

New York.—Chairman: President NICHOLAS MURRAY BUTLER, LL. D., Columbia University, New York; President J. G. Schurman, LL. D., Cornell University, Ithaca; Chancellor J. R. Day, LL. D., Syracuse University, Syracuse.

North Carolina.—Chairman: President F. P. VENABLE, Ph. D., University of North Carolina, Chapel Hill; Prof. Eben Alexander, University of North Carolina; Prof. Edwin Mims, Trinity College, Durham; Prof. J. B. Carlyle, Wake Forest College, Wake Forest; Prof. James L. Douglas, Davidson College, Davidson.

North Dakota.—Chairman: President WEBSTER MERRIFIELD, M. A., State University, University; President J. H. Morley, LL. D., Fargo College, Fargo; President E. P. Robertson, Red River Valley University, Wahpeton.

Ohio.—Chairman: President W. O. THOMPSON, LL. D., State University, Columbus; President H. C. King, D. D., Oberlin College, Oberlin; President ———, Ohio Wesleyan University, Delaware; President Alfred T. Perry, D. D., Marietta College, Marietta; President George Scott, Ph. D., Otterbein University, Westerville.

Oklahoma.—Chairman: President DAVID R. BOYD, Ph. D., State University, Norman; President F. H. Umholtz, Edmond Normal College, Edmond; President A. C. Scott, A. and M. College, Stillwater; President T. W. Conway, Alva Normal College, Alva; President J. R. Campbell, Weatherford, South-Western Normal College; President J. H. House, Kingfisher College, Kingfisher.

Oregon.—Chairman: President P. L. CAMPBELL, State University, Eugene (with four colleagues).

Pennsylvania.—Chairman: President CHAS. C. HARRISON, University of Pennsylvania, Philadelphia; President Edward D. Warfield, Lafayette College, Easton; President Isaac C. Ketler, Grove City College, Grove City; President J. H. Harris, LL. D., Bucknell University, Lewisburg; President Wm. H. Crawford, D. D., Allegheny College, Meadville; President Isaac Sharpless, LL. D., Haverford College, Haverford.

Rhode Island.—Chairman: President W. H. P. FAUNCE, D. D., Brown University, Providence; Prof. William C. Poland, Brown University; Prof. Alexander Meiklejohn, dean of Brown University; Prof. Francis G. Allinson, Brown University; Dr. C. E. Dennis, jr., principal of Hope Street High School, Providence; Mr. Herbert W. Lull, superintendent of public schools, Newport; Mr. Frank E. Thompson, principal of Newport-Rogers High School, Newport.

South Carolina.—Chairman: President B. SLOAN, South Carolina College, Columbia; Prof. C. W. Bain, South Carolina College, Columbia; Dr. E. B. Setzler, Newberry College, Newberry; Prof. B. E. Geer, Furman University, Greenville; Prof. Della Torre, College of Charleston, Charleston; Prof. A. G. Rembert, Wofford College, Spartanburg.

South Dakota.—Chairman: President GARRETT DROPPERS, A. B., State University, Vermillion; President H. K. Warren, M. A., Yankton College, Yankton; President Thomas Nicholson, Dakota University, Mitchell.

Tennessee.—Chairman: President BROWN AYRES, University of Tennessee, Knoxville; Prof. Th. W. Jordan, dean of University of Tennessee; Vice-Chancellor B. L. Wiggins, University of the South, Sewanee; Chancellor James H. Kirkland, Vanderbilt University, Nashville.

Texas.—Chairman: President WM. L. PRATHER, LL. D., State University, Austin; Dr. R. S. Hyer, regent of South Western University, Georgetown; Dr. S. P. Brooks, president of Baylor University, Waco.

Utah.—Chairman: President J. T. KINGSBURY, Ph. D., State University, Salt Lake City; Prof. Byron Cummings, State University; Principal George A. Eaton, Salt Lake City High School.

Vermont.—Appointments to be made in rotation by (1) University of Vermont, (2) Middlebury College.

Virginia.—Chairman: President EDWIN A. ALDERMAN, University of Virignia, Charlottesville; Prof. F. V. N. Painter, Roanoke College, Salem; Prof. S. G. Mitchell, Richmond College, Richmond.

Washington.—Chairman: Appointment to be made in rotation by the State University, Whitman College (Walla Walla), the State Agricultural College.

West Virginia.—Chairman: President D. B. PURINTON, Ph. D., State University, Morgantown; Thos. C. Miller, State superintendent of schools, Charleston; T. E. Cramblet, LL. D., president of Bethany College.

Wisconsin.—Chairman: President CH. R. VAN HISE, LL. D., University of Wisconsin, Madison; President Wm. C. Daland, D. D., Milton College, Milton; President Edward D. Eaton, D. D., Beloit College, Beloit; President Richard C. Hughes, Ripon College, Ripon; President Samuel Plantz, D. D., Lawrence University, Appleton.

Wyoming.—Chairman: President FREDERICK M. TISDEL, University of Wyoming, Laramie.

These committees, acting under instructions from the trustees, held the examinations upon the dates appointed, viz, April 13 and 14, 1904, the time for the examinations being set so that they were going on simultaneously all over the country—that is to say, while a given subject was set for 11 a. m. eastern time in the Eastern States the same subject was set for 10, 9, and 8 a. m. in the Middle, Western, Mountain, and Pacific States, respectively. The instructions issued by the trustees and sent to each committee of selection were as follows:

THE RHODES SCHOLARSHIP TRUST.

MEMORANDUM FOR COMMITTEES OF SELECTION MAKING APPOINTMENTS TO SCHOLARSHIPS THROUGHOUT THE UNITED STATES IN 1904.

1. A written examination will be held, beginning on April 13, at a place fixed by the committee of selection for each State. This committee will appoint a suitable person to supervise the examination, and will arrange for its impartial conduct. It should be clearly understood that this examination is not competitive, but simply qualifying, and is intended to give assurance that no elected scholar will be unable to pass responsions, the first examination which the university demands of all candidates for the B. A. degree.

2. At the request of the trustees the University of Oxford has named for the present year three examiners to prepare examination papers and report upon the replies given. The papers will be forwarded in sealed parcels to the chairman of the committee of selection. The parcels containing the examination papers shall only be opened by the supervising examiner at the time and place of examination. As the papers contain the full text of all classical passages used in examination, no text-books will be required by candidates. Arrangements will be made to supply stationery to candidates at the place of examination.

3. The replies made by candidates shall be collected at the close of each examination, and forwarded in sealed parcels to a center to be fixed by the trust for dispatch to the examiners at Oxford.

4. The University of Oxford has agreed to accept in lieu of responsions the certificate of its examiners that students have passed this examination, so that all scholars elected will be excused from that test when they come into residence at Oxford.

5. As soon as the report of the examiners has been received, the chairman of the committee of selection will be furnished with a list of the candidates who have passed, and are therefore eligible for election.

6. The committee of selection will then proceed to choose the scholar for the year.

In accordance with the wish of Mr. Rhodes, the trustees desire that "in the election of a student to a scholarship, regard shall be had to (1) his literary and scholastic attainments; (2) his fondness for and success in manly outdoor sports, such as cricket, football, and the like; (3) his qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness, and fellowship, and (4) his exhibition during school days of moral force of character and of instincts to lead and to take an interest in his schoolmates." Mr. Rhodes suggested that (2) and (3) should be decided in any school or college by the votes of fellow-students, and (4) by the head of the school or college.

Where circumstances render it impracticable to carry out the letter of these suggestions, the trustees hope that every effort will be made to give effect to their spirit, but desire it to be understood that the final decision must rest with the committee of selection.

7. To aid in making a choice, each candidate should therefore be required to furnish to the chairman of the committee of selection (*a*) a certificate of age; (*b*) a certificate

from his school or college that he has been selected as the candidate for that school or college who best fulfills the ideas of Mr. Rhodes's bequest; (*c*) a statement from his school or college of the grounds upon which he was chosen, including his educational qualifications, his record in athletics, and such testimonials from his masters at school and his professors at college, in reference to the qualities indicated by Mr. Rhodes, as seem best adapted to guide the judgment of the committee of selection.

8. Should it seem advisable, the committee of selection is free to apply to the candidates, or to any selected number of them, such further intellectual or other tests as they may consider necessary.

9. The chairman of the committee of selection will at once notify to the trustees or their agent the name of the elected scholar, and will forward to Mr. F. J. Wylie, the Rhodes Trust, Oxford, all the credentials and testimonials relating to scholarship and character on which the selection was made.

10. The elected scholar will then be furnished by the chairman of the committee of selection with a memorandum, prepared by the representative of the trustees at Oxford, of the steps necessary to be taken to have his name enrolled at one of the colleges of the university.

11. The scholarship will be paid in four quarterly installments, the first on beginning residence at Oxford, and thereafter terminally on the certificate of the college that the work and conduct of the student have been satisfactory. Without such a certificate the scholarship lapses. A scholarship which lapses either from the failure of a student to secure this college certificate, from resignation, from marriage, or from any other cause will not be filled up till the year in which it would naturally expire. This provision is made in order not to interfere with the rota of succeeding scholars.

The following six papers were set for the examinations of April 13 and 14, 1904, three for each day. To give an idea of the care taken to insure the safe arrival of the papers in the hands of the chairman of the committee of selection in each State, it should be said that a sufficient number of copies of each paper to allow one copy to each candidate were sealed in a labeled envelope, thus making six envelopes for each center of examination. These six envelopes were then placed in a large envelope, which was also sealed and labeled and marked with the name of a State. In some cases more than one of these parcels were sent to the same State. This packing was done in England. All the parcels thus prepared were packed in a metal box, which was locked and shipped to the United States Commissioner of Education in Washington. This box was opened by him, and under his supervision the various parcels were properly addressed and forwarded to their destinations, and each separate envelope remained sealed until the hour set for examination upon the paper it contained was reached. There was thus hardly a possibility of gaining knowledge of any of the questions before examination. When the examinations were finished the papers and answers properly sealed were returned to the Commissioner of Education and immediately upon their receipt were replaced, unopened, in the chest in which they had come from England and were then forwarded to Oxford. The papers all had the same heading, a specimen of which is given with the first. They are arranged in the order of time in which they were set for the candidates.

DELEGACY OF LOCAL EXAMINATIONS, OXFORD, ENGLAND.

(Examination conducted in behalf of the trustees of the Rhodes bequest, April, 1904.)

TRANSLATION FROM LATIN INTO ENGLISH.

[The following rules apply to each paper.]

The time allowed for this paper is two hours.

Every candidate must write on each page of his answers (1) his name; (2) the town and State or Province in which he is examined; (3) the subject of the paper and the number of the section chosen, and must write on one side only of the writing paper.

The paper contains the following sections:

1. Passages from authors not specially prescribed.
2. Passages from Cæsar, De Bello Gallico I to IV.
3. Passages from Cicero, Philippics I, II.

4. Passages from Cicero, In Catilinam I to IV, and In Verrem Actio I.
5. Passages from Cicero, Pro Murena and Pro Lege Manilia.
6. Passages from Cicero, De Senectute and De Amicitia.
7. Passages from Horace, Odes.
8. Passages from Horace, Satires.
9. Passages from Horace, Epistles.
10. Passages from Livy V, VI.
11. Passages from Virgil, Georgics.
12. Passages from Virgil, Bucolics and Æneid I to VI.

N. B.—Candidates must select one and only one of the sections numbered 1 to 12.

LATIN PROSE COMPOSITION.

Translate into Latin:

The prince, who had already been informed of the conspiracy, sent messengers to all his allies to ask for reenforcements, and, as soon as he heard that these had set out, called together three hundred of the most distinguished citizens, pretending that he wished to consult them on the affairs of the republic. Orders were given that each, as he entered the palace, should be put to death, and a large force of cavalry was drawn up in the streets to prevent any danger of a popular tumult. But the people also were ready. During the whole day they had been quietly assembling in the houses, waiting until the signal should be given. Suddenly there arose the cry, "To arms," and, while some threw down stones and firebrands, the others rushed forth from the doors, dragged the soldiers from their horses, and slew them before they had time to defend themselves. The attack was too violent to be resisted, and when the reenforcements arrived the city was in the hands of the populace.

ARITHMETIC.

1. Find the smallest integer which is divisible by all the numbers 143, 78, 91, 637, 286.

2. Multiply $1.1\dot{6}$ by $.\dot{4}28571$, and divide .007424 by 25.6.

3. If a man can build 1 rod 1 yard 1 foot 6 inches of a wall in 1 day, how much can he build in 52 days?

4. Find the square roots of 122.1025 and $538\frac{6}{25}$.

5. The par of exchange with London being 4.8665, find the equivalents of £137 4s. 6½d. and $542.84 to the nearest cent and farthing, respectively.

6. A walk 10 feet wide is made round a rectangular park within the fence, the park being 200 yards by 150 yards. How many square yards are there in the walk?

7. Two men of equal skill agreed to do a piece of work for $124. They completed it in 18 days, but one man was absent from work on 5 days. How should the pay be equitably divided?

8. Find the amount of $4,000 if lent for 3 years at 4½ per cent per annum compound interest.

9. Three pipes can respectively fill a cistern in 22, 24, and 72 minutes. If, when the cistern is empty, all the pipes are opened, in how many minutes will it be full?

10. A person invested $22,050 in a 3 per cent stock at 90. He afterwards sold out at 93⅓ and invested the proceeds in a 4½ per cent stock at 98. Find the change in his income.

11. In what time will $1,260 amount to $1,496.25 if lent at 3¾ per cent per annum simple interest?

TRANSLATION FROM GREEK INTO ENGLISH.

The paper contains the following sections:
1. Passages from authors not specially prescribed.
2. Passages from Demosthenes, Philippics, I to III, and Olynthiacs, I to III.
3. Passages from Demosthenes, De Corona.
4. Passages from Euripides, (a) Hecuba, (b) Medea, (c) Alcestis, (d) Bacchae.
5. Passages from Homer, Iliad, I to IV.
6. Passages from Homer, Odyssey, I to VI.
7. Passages from Plato, Apology, Crito.
8. Passages from Sophocles, Antigone, and Ajax.
9. Passages from Xenophon, Anabasis, I to V.

N. B.—Candidates must select one, and only one, of the sections numbered 1 to 9.

GREEK AND LATIN GRAMMAR.

1. Give the meaning, gender, and dative plural of *ὀδούς*, *λεώς*, *γάλα*, *ὄρνις*, *κέλευθος*, and the meaning, gender, and genitive plural of nummus, artus, dies, imber, calcar.

2. Give the comparative and superlative of *νέος*, *ἅρπαξ*, *μακρός*, vetus, utilis, prope.

3. Decline in the singular *ὀξύς*, *ὅστις*, *ἀληθής*; and in the plural, melior, qui, idem.

4. Distinguish between the uses of *αὐτός* and *ὁ αὐτός*, *ποσός*, *ὅσος*, and *ὅποσος*, mille and millia, aliquis and quisquam, is and ille.

5. State, with examples, the principal ways of forming the perfect tense in Greek and Latin.

6. Write down the third person, singular and plural, of the following tenses: Present subjunctive active of *δηλόω*; aorist indicative active of *αἱρέω*; aorist optative passive of *τίθημι*; future indicative active of capio; future perfect indicative active of tribuo; imperfect subjunctive of nolo.

7. What prepositions in Latin and Greek may be used with two cases? Give examples and append to each its English equivalent.

8. State and illustrate (*a*) the rules for conditional sentences in Greek; (*b*) the rules for the sequence of tenses in Latin.

9. Translate into Latin: (*a*) The consul left the city without saluting his colleague; (*b*) He is too wise to disobey his orders; (*c*) If you finish your work to-morrow you will be allowed to return home; (*d*) I fear that he will not reach Italy in time to see his brother; (*e*) When he was at Athens I told him to remain there until I came.

10. Put into Oratio Obliqua: Quoniam me una vobiscum servare non possum vestrae quidem certe vitae prospiciam quos cupiditate gloriae adductus in periculum deduxi. Frustra meae vitae subvenire conamini quem iam sanguis viresque deficiunt. Proinde hinc abite dum est facultas vosque ad legionem recipite.

ALGEBRA AND GEOMETRY.

Algebra.

[The full working must be shown in all cases.]

1. If $x = 1$, $y = \frac{1}{2}$, $z = -\frac{1}{3}$, find the value of

$$\frac{y-z}{1+yz} + \frac{z-x}{1+zx} + \frac{x-y}{1+xy}.$$

2. Multiply x^5-3x^3+2x-1 by x^5+3x^3-2x+1, and verify the result in the case where $x=2$.

3. Find the remainder when x^3+5x^2-7x+4 is divided by x^2+x+2. For what value of x will the remainder be zero?

4. Resolve into their simplest real factors—
   (1) x^3+343y^3;
   (2) $a^2x^2-2ax-b^2x^2+2bx$;
   (3) x^4+4x^2+16.

5. Simplify—
   (1) $\frac{1}{x^2-3x+2} + \frac{1}{2x^2-5x+2} + \frac{1}{2x^2-3x+1}$;
   (2) $\dfrac{\left(\frac{x}{y}-1+\frac{y}{x}\right)\left(\frac{1}{y}+\frac{1}{x}\right)}{\frac{x^2}{y}+\frac{y^2}{x}}$

6. Solve the equations—
   (1) $\frac{1}{2x+3} + \frac{1}{2x-3} = \frac{1}{x-6}$;
   (2) $\frac{x-a}{b} + \frac{x-b}{a} = 2$;
   (3) $10x-18y=45$, $2x+4=y$.

7. Describe clearly the process of solving graphically two simultaneous equations of the first degree in two variables. How would you apply this process in the case of the equations given in question 6 (3)?

8. Find four consecutive odd numbers whose sum is 1904.

9. A sum of $4,950 is invested partly in Canadian Pacific common shares, paying 6 per cent, at 115, and partly in United States 4 per cent loan, at 132½. The total income being $200, find the amount of each investment.

Geometry.

[The use of reasonable symbols and abbreviations is permitted.]

1. Define— right angle, rhombus, parallel straight lines.

2. If two angles of a triangle be equal to one another, the sides also which subtend, or are opposite to, the equal angles, shall be equal to one another.

3. If one side of a triangle be produced, the exterior angle shall be greater than either of the interior opposite angles.

4. If a straight line falling on two other straight lines, make the exterior angle equal to the interior and opposite angle on the same side of the line, or make the interior angles on the same side together equal to two right angles, the two straight lines shall be parallel to one another.

5. The opposite sides and angles of a parallelogram are equal to one another, and the diameter bisects the parallelogram—that is, divides it into two equal parts.

6. If the square described on one of the sides of a triangle be equal to the squares described on the other two sides of it, the angle contained by these two sides is a right angle.

7. If a straight line be divided into any two parts, the square on the whole line is equal to the squares on the two parts, together with twice the rectangle contained by the two parts.

8. Divide a given straight line into two parts, so that the rectangle contained by the whole and one of the parts may be equal to the square on the other part.

The following is a list of the names of the Rhodes scholars for 1904, with the colleges at Oxford to which they were assigned and the States from which they were appointed:

American Rhodes scholars, 1904.

State.	Name of scholar.	College.
Alabama	J. H. Kirkpatrick	Queens.
Arkansas	N. Caruthers	Pembroke.
California	W. Crittenden	Trinity.
Colorado	S. K. Hornbeck	Christ Church.
Connecticut	P. Nixon	Balliol.
Delaware	C. W. Bush	Brasenose.
Georgia	R. P. Brooks	Do.
Idaho	L. Gipson	Lincoln.
Illinois	R. Henry	Worcester.
Indiana	G. Hamilton	Pembroke.
Iowa	J. E. Walleser	Oriel.
Kansas	E. W. Murray	St. John's.
Kentucky	C. Tandy	Exeter.
Louisiana	A. K. Read	Christ Church.
Maine	D. R. Porter	Trinity.
Maryland	P. Kieffer	Oriel.
Massachusetts	F. H. Forbes	Balliol.
Michigan	W. Sperry	Queens.
Minnesota	B. Wallace	Pembroke.
Missouri	R. E. Blodgett	Wadham.
Montana	G. R. Barnes	Christ Church.
Nebraska	R. Coon	Lincoln.
New Hampshire	J. A. Brown	New.
New Jersey	B. M. Price	Wadham.
New York	W. E. Schutt	Brasenose.
North Carolina	J. H. Winston	Christ Church.
North Dakota	H. Hinds	Queens.
Ohio	G. C. Vincent	Do.
Oklahoma	W. L. Kendall	Brasenose.

American Rhodes scholars, 1904—Continued.

State.	Name of scholar.	College.
Oregon	H. B. Densmore	University.
Pennsylvania	T. E. Robins	Christ Church.
Rhode Island	R. M. Bevan	Worcester.
South Carolina	W. H. Verner	Christ Church.
South Dakota	P. M. Young	Oriel.
Tennessee	T. Tigert	Pembroke.
Texas	S. R. Ashby	Merton.
Utah	B. M. Jacobson	Exeter.
Vermont	J. C. Sherburne	Wadham.
Virginia	W. A. Fleet	Magdalen.
Washington	J. M. Johanson	Exeter.
West Virginia	C. A. Tucker-Brooke	St. John's.
Wisconsin	R. Scholz	Worcester.
Wyoming	H. Merriam	Lincoln.

The experience gained in 1904 suggested some changes in the instructions to the committees of selection for the examinations of 1905, which were embodied in the following memorandum and declaration sent out by the Rhodes trustees. It was found advisable to hold the examinations in January to allow the Oxford examiners time to complete their work before midsummer. The same precautions were observed in transmitting the papers as in the previous year.

MEMORANDUM.

The Rhodes Scholarships in the United States, 1905.

The trustees of the will of the late Mr. Cecil Rhodes have prepared the following memorandum for the information of college authorities and intending candidates for scholarships in the United States:

The next qualifying examinations for scholars in the United States under the Rhodes bequest will be held on Tuesday and Wednesday, January 17 and 18, 1905. The selection of scholars is to be completed before the end of March, and the elected scholars will begin residence at Oxford in October, 1905.

The examination will be held in each State and Territory to which scholarships are assigned, at centers to be fixed by the local committee of selection. This committee will appoint a suitable person to supervise the examination and will arrange for its impartial conduct. It should be clearly understood that this examination is not competitive, but simply qualifying, and is merely intended to give assurance that every elected scholar is able to pass the first examination which the university demands of all candidates for the B. A. degree.

The Rhodes scholars will be selected from candidates who have successfully passed this examination. One scholar will be chosen for each State and Territory to which scholarships are assigned.

Candidates must be unmarried, must be citizens of the United States, and must be not younger than 19 nor older than 25 years of age on October 1 of the year in which they are elected.

It has been decided that all scholars shall have reached, before going into residence, at least the end of their sophomore or second-year work at some recognized degree-granting university or college of the United States.

An exception to this rule is made in the case of the State of Massachusetts, where, at the request of the committee of selection, authority is given to appoint from the secondary schools.

Candidates may elect whether they will apply for the scholarship of the State or Territory in which they have acquired any large part of their educational qualification, or for that of the State or Territory in which they have their ordinary private domicile, home, or residence. They may pass the qualifying examination at any center, but they must be prepared to present themselves before election to the committee in the State or Territory they select.

No candidate may compete in more than one State or Territory.

To meet the requirements of the responsions examination candidates will be examined in the following subjects:

1. Arithmetic—the whole.

2. Either the elements of algebra (addition, subtraction, multiplication, division, greatest common measure, least common multiple, fractions, extraction of square root,

simple equations containing one or two unknown quantities, and problems producing such equations) or the elements of geometry.

Elementary questions, including propositions enunciated by Euclid, and easy deductions therefrom, will be set on the subject-matter contained in the following portions of Euclid's Elements, viz, Book I, the whole, excluding propositions 7, 16, 17, 21; Book II, the whole, excluding proposition 8; Book III, the whole, excluding propositions 2, 4–10, 13, 23, 24, 26–29.

Any method of proof will be accepted which shows clearness and accuracy in geometrical reasoning.

So far as possible, candidates should aim at making the proof of any proposition complete in itself.

In the case of propositions 1–7, 9, 10, of Book II, algebraical proofs will be allowed.

3. Greek and Latin grammar.

4. Translation from English into Latin.

5. One Greek and one Latin book.

Any of the following portions of the under-mentioned authors will be accepted as a "book:"

Demosthenes: De Corona.

Euripides (any two of the following plays): Hecuba, Medea, Alcestis, Bacchæ.

Homer: (1) Iliad, 1–5 or 2–6; or (2) Odyssey, 1–5 or 2–6.

Plato: Apology and Crito.

Sophocles: Antigone and Ajax.

Xenophon: Anabasis, 1–4 or 2–5.

Cæsar: De Bello Gallico, 1–4.

Cicero: (1) Philippics 1, 2; or (2) In Catilinam 1–3, and In Verrem Actio I; or (3) pro Murena and pro Lege Manilia; or (4) de Senectute and de Amicitia.

Horace: (1) Odes 1–4; or (2) Satires; or (3) Epistles.

Livy: Books 5 and 6.

Virgil: (1) the Bucolics, with Books 1–3 of the Æneid; or (2) the Georgics; or (3) the Æneid, Books 1–5 or 2–6.

The texts used in setting the examination papers will be those of the series of Oxford classical texts, so far as these have been published by the Oxford University Press.

At the request of the trustees the University of Oxford has named for next year a board of examiners to prepare examination papers covering this range of study and to report upon the replies given. The papers will be forwarded in sealed parcels to the chairman of the committee of selection. Within these parcels will be inclosed sealed envelopes containing the examination papers. These envelopes shall only be opened by the supervising examiner at the time and place of examination. Printed time-tables will be supplied. As the papers contain the full text of all classical passages used in examination no text-books will be required by candidates. Arrangements will be made to supply stationery to candidates at the place of examination.

The replies made by candidates shall be collected at the close of each examination and forwarded at the close of each day's work in sealed parcels to Dr. G. R. Parkin, care of Hon. W. T. Harris, Commissioner of Education, Washington.

The University of Oxford has agreed to accept in lieu of responsions the certificates of its examiners that students have passed this examination, so that all scholars elected will be excused from that test when they come into residence at Oxford. As a certificate of exemption from responsions holds good permanently persons who have passed in previous years, if otherwise eligible, need not take the examination a second time in order to become qualified as candidates.

As soon as the report of the examiners has been received the chairman of the committee of selection in each State will be furnished with a list of the candidates who have passed and are therefore eligible for election.

The committee of selection will then proceed to choose the scholar for the year.

In accordance with the wish of Mr. Rhodes the trustees desire that "in the election of a student to a scholarship regard shall be had to (1) his literary and scholastic attainments; (2) his fondness for and success in manly out-door sports, such as cricket, football, and the like; (3) his qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness, and fellowship, and (4) his exhibition during school days of moral force of character, and of instincts to lead and to take an interest in his schoolmates." Mr. Rhodes suggested that (2) and (3) should be decided in any school or college by the votes of fellow-students and (4) by the head of the school or college.

Where circumstances render it impracticable to carry out the letter of these suggestions the trustees hope that every effort will be made to give effect to their spirit, but desire it to be understood that the final decision must rest with the committee of selection.

To aid in making a choice each qualified candidate should be required to furnish to the chairman of the committee of selection—

(*a*) A certificate of age.

(*b*) A full statement of his educational career at school and college; his record in athletics and such testimonials from his masters at school and his professors at college, in reference to the qualities indicated by Mr. Rhodes, as will assist the judgment of the committee of selection.

(*c*) In cases where more than one candidate from a single college or university has qualified, the college or university should be required to select (in accordance with the views of Mr. Rhodes) its chosen representative to go before the committee of selection for final choice, and a certificate that he has been so chosen shall be sent to the chairman of the committee of selection.

Each candidate should personally present himself to the committee of selection before a final decision is made, unless specially excused by the committee itself, in which case a statement of the reasons should be sent to the trustees.

If a careful comparison of these records and personal interviews with the candidates do not furnish sufficient grounds for making a decision, the committee of selection is free to apply to the candidates, or to any selected number of them, such further intellectual or other tests as they may consider necessary.

The chairman of the committee of selection should at once notify to the trustees and to Mr. F. J. Wylie, the Rhodes trust, Oxford, the name of the elected scholar, and should forward to the latter all the records, credentials, and testimonials relating to the scholar on which the election was made. These papers should be transmitted immediately, as they are used in consulting college authorities in regard to the admission of scholars.

The chairmen of the committees of selection are furnished with a memorandum prepared by the representative of the trustees at Oxford in regard to the steps necessary to be taken by an elected scholar to have his name enrolled at one of the colleges of the university. It is particularly requested that this memorandum should be furnished to the elected scholar along with the notification of his election.

The scholarship will be paid in four quarterly installments; the first on beginning residence at Oxford, and thereafter terminally on the certificate of his college that the work and conduct of a student have been satisfactory. Without such a certificate the scholarship lapses. A scholarship which lapses either from the failure of a student to secure this college certificate, from resignation, from marriage, or from any other cause, will not be filled up till the year in which it would naturally expire. This provision is made in order not to interfere with the rota of succeeding scholars.

OXFORD UNIVERSITY EXAMINATION.

CONDUCTED IN BEHALF OF THE TRUSTEES OF THE RHODES BEQUEST, JANUARY 17, 18, 1905.

Declaration to be signed by every person who has assisted in the superintendence of an examination conducted for the Rhodes trustees by the delegates of local examinations, Oxford, England.

We, the undersigned, hereby declare that the papers set at.....in the State (or Province) of.....to the following candidates[a] for the State (or Province) of.....,[b] viz:

1.....	16.....
2.....	17.....
3.....	18.....
4.....	19.....
5.....	20.....
6.....	21.....
7.....	22.....
8.....	23.....
9.....	24.....
10.....	25.....
11.....	26.....
12.....	27.....
13.....	28.....
14.....	29.....
15.....	30.....

were worked in the presence of one or other of us by the candidates whose names they respectively bear, and that the candidates received no assistance whatever from books, notes, memoranda, or otherwise, from each other, from us, or any other person.

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[a] It is particularly requested that the names of candidates be given in full.

[b] It is specially requested that, when anyone is examined in a State (or Province) for which he is not a candidate, the name of the State (or Province) for which he is a candidate should be clearly indicated.

We declare—

1. That the sealed envelopes of question papers were opened in the presence of the candidates at the times prescribed in the time-table of the examination.

2. That no candidate was admitted to the examination room more than half an hour after the question papers had been distributed to the candidates.

3. That no candidate left, and no copy of any question paper was removed from the examination room until half an hour after the distribution of the question papers.

4. That no person other than the candidates and the undersigned was admitted to the examination room during the presence of any candidates.

5. That all the answers were collected not later than two hours after the distribution of the question papers and dispatched forthwith under seal to..... and that no one whatever tampered with the answers.

6. That one or other of us was present uninterruptedly during the whole of the time specified in the time-table of the examination.

7. That all the other regulations relating to the conduct of the examination were duly observed.

Name, degree, and university (if any), and address of the person or persons who were present during the working of the papers referred to in the above declaration:

JANUARY 18, 1905.

[This sheet should be mailed on January 18 by registered post to the Secretary to the Delegates, Local Examination offices, Merton street, Oxford, England, immediately after the close of the examination.]

American Rhodes scholars, 1905.

State.	Name.	College.
California	Hugh A. Moran	Wadham.
Colorado	George A. Whiteley	Merton.
Connecticut	Albert Mason Stevens	Balliol.
Delaware	Harry Richard Isaacs	Exeter.
Florida	F. W. Buckholtz	Pembroke.
Georgia	T. H. Wade	Exeter.
Idaho	Carol H. Foster	Brasenose.
Illinois	Newton Edward Ensign	St. Edmund Hall.
Indiana	Frank Aydelotte	Brasenose.
Iowa	Jacob van der Zee	Merton.
Kansas	Frank M. Mohler	St. John's.
Kentucky	William Henry Branham	Queen's.
Louisiana	Ralph C. Many	Do.
Maine	Harold William Soulo	Worcester.
Maryland	E. McPherson Armstrong	Oriel.
Massachusetts	Roy Kennet Hack	Do.
Michigan	R. C. Platt	Hertford.
Minnesota	Harry S. Mitchell	New.
Mississippi	Ebb J. Ford	Christ Church.
Missouri	Samuel Ely Eliot	Hertford.
Nebraska	Arthur H. Marsh	Keble.
New Hampshire	William Wentworth Thayer	Magdalen.
New Jersey	Bertal Leigh Alexander	Queen's.
New Mexico	Thomas S. Bell	Lincoln.
New York	Ralph Claude Willard	University.
North Carolina	Henry Trantham	Christ Church.
Ohio	Cary R. Alburn	St. John's.
Oklahoma	Charles Delahunt Mahaffie	Do.
Pennsylvania	John Nevin Schaeffer	Oriel.
Rhode Island	Leonard Wolsey Cronkhite	Worcester.
South Carolina	Eugene S. Towles	Magdalen.
Tennessee	B. E. Schmitt	Merton
Texas	Harry Peyton Steger	Balliol.
Vermont	H. H. Holt	Exeter.
Virginia	Beverly D Tucker	Christ Church.
Washington	Llewelyn L. Railsback	Lincoln.
West Virginia	E. R. Lloyd	Wadham.
Wisconsin	Athol E. Rollins	Worcester.

[Extracts from a memorandum issued by the Rhodes trustees relating to the examination of 1907.]

* * * The next qualifying examination for scholars in the United States under the Rhodes bequest will be held about the middle of January, 1907; the selection of scholars will be completed before the end of March, and the elected scholars will begin residence at Oxford in October of that year.

Scholarships will also be open in 1908; in 1910 and 1911; in 1913 and 1914; and so on, omitting every third year.

The scholarships are of the value of £300 a year, and are tenable for three years. * * *

If it should be necessary a revised statement of the requirements of the examination for 1907 will be issued during the year 1906. Sets of the responsions examination papers for past years can be ordered from the Oxford University Press, 91 Fifth avenue, New York.

The texts used in setting the examination papers are those of the series of Oxford classical texts, so-far as these have been published by the Oxford University Press.

At the request of the trustees, the University of Oxford named in the years 1904 and 1905 a board of examiners to prepare examination papers covering this range of study, and to report upon the replies given. It is proposed, with the approval of the university, to adopt the same methods of procedure in 1907. The papers will be forwarded in sealed parcels to the chairman of the committee of selection. Within these parcels will be inclosed sealed envelopes containing the examination papers. These envelopes shall only be opened by the supervising examiner at the time and place of the examination. Printed time tables will be supplied. As the papers contain the full text of all classical passages used in examination, no text-books will be required by candidates. Arrangements will be made to supply stationery to candidates at the place of examination. * * *

The following "instructions," issued to scholars elected for the year 1905, indicate the course of procedure by which a scholar is entered at Oxford:

1. In order to be admitted to the University of Oxford it is necessary to be first accepted as a member of one of the colleges which compose the university.

Election to a Rhodes scholarship does not of itself admit to a college. Every college has its own standard for admission, for Rhodes scholars as for all other applicants; and accepts or rejects at its own discretion. Moreover, the number of Rhodes scholars which any one college will admit is strictly limited. Few colleges will admit more than five in any one year; and in the majority of cases four is the maximum. From the different candidates for admission a college will select those whose records suggest that they are most likely to do credit to the college to which they may belong. It is therefore essential that in applying for admission to a college a scholar should submit the fullest possible evidence as to his personal character and academic record.

2. The procedure for a scholar-elect should be as follows:

(1) Immediately on receiving notice of his election he should write to the Oxford secretary, to the Rhodes trustees, Mr. F. J. Wylie, The Rhodes Trust, Oxford, stating in order the colleges which he prefers.

(2) He should satisfy himself that the credentials which he submitted to the committee of selection have been forwarded by the chairman to Mr. Wylie.

(3) He should himself forward to Mr. Wylie any portion of the following information which may not have been included in the documents submitted to the committee of selection: (*a*) A certificate of age; (*b*) testimonials as to character; (*c*) certified evidence as to the courses of study pursued by the scholar at his university, and as to the gradings attained to by him in those courses. This evidence should be signed by the registrar or other responsible official of his university; (*d*) a catalogue of his university; (*e*) evidence as to the general tastes and pursuits of the scholar outside his academic course; (*f*) information as to the intentions of the scholar in regard to the line of study he proposes to follow at Oxford. It is also desirable that the scholar should state to what religious denomination he belongs. All this material must reach Mr. Wylie by the beginning of the summer term—that is, by the end of April at the latest.

3. When Mr. Wylie has the necessary information in his hands he will attempt to secure for each scholar admission to the college of his preference. That will not be always possible. When a scholar fails to gain admission to the college which stands first on his list of preferences, Mr. Wylie will enter into negotiation with the college second on that list, and so on.

Where he is specially requested to do so, Mr. Wylie is prepared to select a college for a scholar, but it is greatly to be preferred that each scholar should, so far as possible, choose for himself.

4. Information about the various colleges is to be found in the early chapters of the "Students' Handbook to Oxford." This book can be obtained at the Oxford University Press, 91 Fifth avenue, New York. Scholars-elect are recommended to get it.

5. A study of Chapter III of the above-mentioned book will afford a rough, though only a rough, idea of the cost of life at Oxford, and in particular of the expenses which an undergraduate has to meet on coming for the first time into residence.

6. The scholarship will be paid quarterly. The first payment (£75) will be made in the course of the first week of the Michaelmas term. No request for any earlier payment can be considered.

7. The sum of £300 is no more than is necessary to cover the expenses of the year, including vacations as well as term. A scholar must not therefore count on his scholarship leaving any margin—least of all in his first year, in which, owing to unavoidable initial payments, expenses are heaviest. Experience suggests that a scholar should start his Oxford career free from financial embarrassment.

8. When a scholar has been once accepted by a college he should conduct all further correspondence as to residence, studies, etc., directly with the college in question. He should, however, keep Mr. Wylie informed of his movements, and in particular of the date at which he proposes to come into residence. Michaelmas term begins normally in the second week of October. Some colleges assemble on the Thursday, others on the Friday, in that week. A scholar must in any case arrive in Oxford not later than the day on which his college assembles; and it will in most cases be better that he should come a few days earlier.

9. It is pr sumed that a scholar will reside in college, except in cases in which the college is unable to offer him rooms. It is the custom at Oxford for an undergraduate to reside in college for at least two years, unless special circumstances make this undesirable.

Copies of this circular may be obtained from the Commissioner of Education, Washington, D. C. They are also supplied to the chairmen of the committees of selection.

CHAPTER IV.

EDUCATION IN FRANCE.

France, Republic: Area, 204,092 square miles; population, 38,961,945 (1901). Civil divisions having special functions in educational administrations: Departments (90 in number, including 3 in Algiers); communes (cities or villages) numbering 36,551.

PREVIOUS ARTICLES.

[In the following index to chapters in previous reports of this series relative to education in France, mention is made only of special subjects considered in each chapter. In addition to these special topics the chapters present detailed statistics, current and comparative, with a brief conspectus of the system of public instruction.]

The educational system of France. (Report, 1888–89, vol. 1, pp. 112–149.)

Report of the educational congresses and exhibition held in Paris, 1889. (Report, 1889–90, vol. 1, pp. 41–186, by W. H. Widgery.)

Statistics for 1888–89. (Ibid., pp. 249–261.)

Elementary education in London and Paris. (Ibid., pp. 263–280.)

Statistics, 1890–91; progress of primary schools since Guizot's law, 1833; higher primary and classical schools of France. (Report, 1890–91, vol. 1, pp. 95–124.)

Statistics for 1892; proposed transformations and development of state faculties. (Report, 1891–92, vol. 1, pp. 73–95.)

Civil service in France, by W. F. and W. W. Willoughby. (Ibid., pp. 369–412.)

Inspection of infant schools; recent changes in the baccalaureate; reorganization of medical studies and of the scientific course preparatory thereto. (Report, 1892–93, vol. 1, pp. 219–237.)

Statistics for 1891–1893; recent modifications in secondary and superior education; progress of the system of primary instruction; schools for adults; movements for the admission of American students to the universities of France. (Report, 1894–95, vol. 1, pp. 289–312.)

Statistics for 1894–95; proposed modifications of secondary institutions; the law of July 10, 1896, transforming the state faculties into universities; status of medical students in France, with special reference to foreigners; Dr. Alcée Fortier on the French lycées. (Report, 1895–96, vol. 1, pp. 611–639.)

Opening of the universities under the law of July 10, 1896; the new doctorate open to foreigners; state secondary schools *v.* church establishments; the law of July, 1893, respecting salaries of teachers of primary schools; the superior primary schools, progress, organization, and scope; M. Boutmy on the reform of the baccalaureate; M. Bréal on the study of Greek. (Report, 1896–97, vol. 1, pp. 29–70.)

Statistics, 1896; decentralizing movement; the reconstruction of the universities; efforts for strengthening the moral influence of the schools; temperance instruction; manual training and technical schools; report of Mr. Charles Copland Perry on technical education in France; the admission of American students into French universities; review of the career of M. Victor Duruy, minister of public instruction, 1863–1869, by the Duc de Broglie; review of the work of M. Henri Marion, first professor of the science of education at the Sorbonne, by M. F. Buisson. (Report, 1897–98, vol. 1, pp. 694–788.)

The universities, as organized under the law of 1896; tabular view, 1887 and 1897; admission of foreign students; the university doctorate created under decree of 1897; primary education; work of the Republic reviewed; secondary education; congress of professors; commission of inquiry. (Report 1898–99, vol. 1, pp. 1086–1138.)

Education at the Paris Exposition. (Report, 1899–1900 vol. 2, pp. 1661–1709.)

Proposed reform of state secondary schools; public lycées and colleges for girls; universities, reorganization and recent development; the congress of primary education. (Report, 1899–1900, vol. 1, pp. 1711–1732.)

Retrospective and current survey of state education; the system of primary school inspection; the new scheme of secondary education; the law subjecting religious orders to civic authority; conspectus of courses of study in the University of Paris; the new university doctorates; international correspondence of students; the teaching of "la morale" in the primary schools; the simplification of French syntax. (Report, 1901, vol. 1, pp. 1081–1136.)

Statistics 1899–1900; new programmes of secondary schools, Doctor Compayré; the reorganized universities, special reports by M. Liard and M. Maurice-Faure; professional and financial status of French primary teachers; report of special commission. (Report, 1902, vol. 1, pp. 667-719.)

Statistics, current and retrospective. Primary schools, organization, and programmes; detailed programme of moral instruction. Programmes of higher primary schools compared with those of American high schools and with those of French secondary schools. (Report, 1903, vol. 1, pp. 585–622.)

TOPICAL OUTLINE.

Salient features of the system of public instruction in France. Uniform organization of the "académies" or local subdivisions of the system. Effects of the law against the religious associations. Efforts to liberalize the universities and colleges. Statistical summary of schools and universities, 1903–4. State appropriations for the service.

Primary education.—Statistics, retrospective and current, with explanatory comments: Enrollment and attendance; the teaching force, number and classification, qualifications, salaries. Movements for prolonging the education of the people and for promoting the social welfare of the young. Expenditure for public primary education. Practical results of primary education. Educational statistics of cities having more than 100,000 inhabitants.

Secondary education.—Lycées and colleges for boys; statistics; the new programmes; salaries of professors and teachers. Lycées and colleges for girls; studies comprised in; distribution of students; enrollment, 1881-1904.

Universities and special schools.—Recent progress; statistics. Technical and industrial schools not under the minister of public instruction; higher technical schools; technical schools of lower grade.

SALIENT FEATURES OF THE SYSTEM OF PUBLIC INSTRUCTION IN FRANCE.

The system of public instruction in France has been described very fully in previous reports of this series. Hence it is enough to recall here the salient features of the system, its compact organization, centralized authority, and uniform operation throughout the country.

The chief of the university system is a cabinet officer, whose title, under the administration of Premier Combes, was "minister of public instruction and fine arts." In the readjustment of public affairs under M. Rouvier (who succeeded M. Combes in January, 1905) public worship was transferred to this ministry, thus restoring a relation which has been repeatedly formed and broken up in the past. The position was held by M. Bienvenu-Martin from January 24, 1905, to March 14, 1906, when it passed to the present incumbent, M. Briand. The inclusion of public worship at the present time in the same ministry as public instruction is undoubtedly intended to facilitate the execution of the recent laws relative to the religious orders.

The three scholastic divisions of the system of public instruction—i. e., department of higher education, department of secondary education, and department of primary education—continue to be administered, respectively, by M. Bayet, M. Rabier, and M. Gasquet. It has been, indeed, the policy of the Republic to give long tenure to the incumbents of these important positions, thereby guarding the actual work of education from the evils of frequent and capricious change of direction. To this important end tends also the mode of selecting the members of the superior council of public instruction, in which all professional matters are carefully deliberated. This council consists of 60 members—one-fourth appointed by the President of the Republic and the remainder elected by their colleagues (professors and teachers). Although the term of service is but four years, the most competent members are generally continued on from term to term.

The chiefs of the scholastic departments named and the superior council belong to the central administration of the system, to which also pertains the corps of general inspectors for primary education. These officials are required to make two annual tours of their respective districts and report directly to the minister of public instruction the results of their observations.

UNIFORM ORGANIZATION OF THE "ACADÉMIES."

The administration of the system is facilitated by its local subdivisions or "académies," 17 in number, which repeat in a measure the features of the central administration. Each academic chief, or rector, is assisted by an advisory council, and has directly under him a corps of inspectors numbering as many as the departments (divisions for civil administration) included in the academy. These civil divisions (90 in all, including three in Algiers) are variously distributed among the academies, within which they form districts for the administration of primary schools. The Paris Academy, the most important of all, includes 9 departments. These have a combined population of 5,772,770, of which nearly two-thirds (3,669,930) is concentrated in the Department of the Seine. The minister of public instruction is the nominal head of the Paris Academy, but its administration rests directly with the vice-rector. The service of M. Gréard, who held this position for thirty years (1872 to 1902), greatly influenced the whole movement of education under the Republic. His successor, M. Liard, comes to the position with the prestige of a long and forceful administration of the department of higher education.

The Paris Academy includes the University of Paris, and 19 of the 111 State lycées (classical colleges) for boys, and 5 of the 41 State lycées for girls. The remaining departments of the Paris Academy include 5 lycées for boys and 2 for girls, making, with the 29 communal (or municipal) colleges (24 for boys and 5 for girls), a total of 55 public secondary schools in this academic district.

In addition to the general administration of the academy, the immediate direction of the affairs of the university and secondary schools in an academy are the special charge of the rector, who is president both of the university council and of the academic council. The latter council, composed of professors of higher and secondary instruction, is the deliberative body whose advice determines measures affecting the general conduct of higher and secondary education throughout the academic division. These duties leave the rector small time for attention to primary education, which is placed under the direction of academic inspectors (one for each department), who rank second only to the rector; all other persons engaged in the service of the primary schools are subordinate to them. The prefect, or civil chief of the department, has a measure of independent authority in school matters, as the appointment of regular teachers rests with him, but he must in every case make his choice from a list approved by the academic inspector. While in general there is but one academic inspector for each department, Paris, with its immense population, requires 8, of whom, however, 1 is specially designated as the director of primary education. The academic inspector is assisted by a corps of inspectors for primary schools in the mean proportion of one to every 150 schools. In 1902 there were 18 primary inspectors in the Department of the Seine and 433 in the remaining departments, making a total of 451.

The smallest of all the academic divisions, Chambéry, in the Alpine region of southeastern France, comprising only two departments with a population of 77,897, presents, on a reduced scale, the features of the largest. At the head is the rector and the academic council; in each of the two departments the usual academic inspector and a corps of primary inspectors. This academy does not possess a full university, but its place in the series of institutions is supplied by a university school of sciences and letters. Four lycées, two for boys and two for girls, and two communal colleges make up the provision of public secondary schools; the primary school system is complete in both departments, including two normal schools, one for men and the other for women, and a full complement of primary schools, both elementary and higher. Every academy between the two extremes, Paris and Chambéry, repeats the same organization and the same liberal provision of schools and colleges.

As the appointment of the entire body of officials, and also of the professors of secondary and of higher education, rests either with the president of the Republic or with

the minister of public instruction, it is easy to understand how the spirit of political unity is maintained throughout the system.

EFFECTS OF THE LAW AGAINST THE RELIGIOUS ASSOCIATIONS.

The characteristics of the system of public instruction above described, which must be kept in mind in any attempt to understand educational movements in France, are derived from the university system established by Napoleon and carefully designed to serve political ends. The influence of the system in this respect, attested under successive governments, has been recently illustrated in the struggle against the teaching orders, or brotherhoods. The associations law of July 1, 1901, which required all the religious orders to apply for special authorization from the Government for the continuance of their existence and work, whether charitable or educational, the subsequent refusals of the Government to sanction the authorizations applied for, and the law of July 8, 1904, requiring the suppression of all the teaching orders (monks and nuns) within a period of ten years, have had the effect already of closing above 5,000 schools out of 10,000 conducted by the religious orders. These measures end the liberty of teaching established by the Falloux law of March 18, 1850, and give to the State a monopoly of education scarcely less than that exercised by the university system of Napoleon.

The repressive influence of the associations law is intensified by the law promulgated December 9, 1905, to take effect December, 1906, providing for the complete separation of church and state and thus ending the relations established by the concordat signed by Napoleon and Pope Pius VII in 1801.

In striking contrast to this aggressive policy are the efforts recently made by the Republic to liberalize the higher teaching agencies of the State by infusing into the universities and colleges the spirit of free initiative and individual responsibility. To this end the old university faculties, which under Napoleon were little more than examining bodies with rigidly prescribed functions, have been restored to the dignity of corporate universities,[a] and the uniformity of the lycées (state colleges) has been modified by new and more elastic programmes.[b]

TABLE I.—*Statistical summary of schools and universities, 1903–4.*

Class of institution.	Date.	Enrollment.			Professors and teachers.		
		Male.	Female.	Total.	Men.	Women.	Total.
Infant schools (écoles maternelles), public and private (ages 2 to 6)	1903–4	.....	.....	679,989	.....	9,445	9,445
Primary schools (ages 6 to 14):							
Public	1903–4	2,410,550	2,017,568	4,428,118	56,847	52,998	109,845
Private	1903–4	383,578	742,512	1,126,090	10,669	35,670	46,339
Total	.....	2,794,128	2,760,080	5,554,208	67,516	88,668	156,184
Primary normal schools (ages 16 to 19)	1904	4,455	3,014	7,469	974	873	1,847
Secondary schools (ages 8 to 20):							
Public	1905	95,165	[c] 30,831	118,367	[d] 3,302	[e] 831	.....
Private	1903	[f] 60,751	.....	.....	.....	.....	.....
Universities:							
State	1905	32,736	1,922	34,658	[g] 1,672	.....	1,672
Private	1903	.....	.....	1,494	.....	.....	.....

[a] For account of the university law of July 10, 1896, and the measures leading up to it, see Report of Commissioner for 1902, vol. 1, Chap. XV, pp. 698–703.

[b] For new programmes of secondary education, see Report for 1902, vol. 1, pp. 687–697.

[c] Includes 7,375 in secondary classes not connected with secondary schools.

[d] Professors in State lycées for boys in 1903. These enrolled 58,593 students, as against 35,612 students in local colleges.

[e] Directresses, professors, matrons, and clerks in secondary schools for girls.

[f] Also 22,497 in seminaries preparing candidates for the priesthood.

[g] In 1904, not including clinical assistants in the faculties of medicine, librarians, etc.

Table I shows the enrollment in primary schools, secondary schools, and universities and the number of teachers and professors employed for the latest year for which official statistics are available.[a] The expenditures for the system of public instruction have not been reported since the issue of the last official statistics which are prepared by the statistical commission at stated intervals.[b]

STATE APPROPRIATIONS.

The appropriations by the legislature for this service have increased by 79½ per cent in the last two decades. They amounted in 1886 to 131,993,455 francs ($26,398,691), in 1905 to 237,014,806 francs ($47,402,961).[c] Of the total increase, $21,004,270, or 79½ per cent, about one-third (in round numbers $6,900,000) was required to carry out the recently adopted scheme of classification for teachers of primary schools, which increases slightly the salaries in the lower classes and provides for more rapid promotion from a lower to a higher class.[d] The appropriation for 1905 was distributed as follows:[e] For administration, 4,039,120 francs ($807,824), 2 per cent, for higher education, including universities, special schools,[f] scientific bureaus, 20,591,596 francs ($4,118,319), 8.6 per cent; secondary education, 26,744,360 francs ($5,348,872), 11.2 per cent; primary education, 173,303,386 francs ($34,660,677), 73 per cent; miscellaneous, chiefly for school buildings, 12,346,344 francs ($2,469,268), 5.2 per cent.

DETAILED STATISTICS OF PRIMARY EDUCATION.

TABLE II.—*Retrospective view of pupils in the primary schools.*[a]

Year	Total number of pupils	Boys.	Girls.	Pupils in schools.			
				Public.	Private.	Secular	Belonging to religious orders.
1837	2,690,035	1,579,888	1,110,147	2,046,455	643,580	.....	.....
1843	3,164,297	1,812,709	1,351,588	2 407,425	756,872	2,457,380	706,917
1850	3 322, 423	1 793,667	1,528,756	2 001,619	720,804	2,368,627	953,796
1866	4,515, 967	2, 343 781	2,172,186	3,537,709	978,258	2,820,670	1,695,297
1872	4 722, 754	2, 445 216	2,277,538	3,835,991	886,763	.....	.....
1876-77	4,716, 935	2, 400 882	2,316,053	3 823 348	893,587	2,648.502	2,068,373
1881 82	5,341. 211	2, 708 510	2 632 701	4,359,256	981 955	3, 567, 861	1, 773, 350
1886-87	5,090,919	2, 829 127	2,767,792	4,505,109	1,091,810	3,877, 185	1,719,734
1891 92	5,556,470	2 805,849	2,750,621	4,281 183	1,275,287	3,900, 977	1,655, 493
1896 97	5,531 418	2, 782 547	2,748,871	4,190,320	1,341,098	3,911 806	1,618, 612
1901 2	5,550 284	2, 776,978	2,774,306	4,175,575	1,374,709	4,040, 329	1,509 955
1902 3	5 552, 762	b2, 785,650	2 767, 112	4,309, 095	1 243,667	4, 435, 747	1, 117, 015

[a] Infant schools not included. Algiers not included prior to 1886–87
[b] Includes a few girls in mixed schools.

It will be seen from the foregoing table that the primary schools of France are classified as public and private, but under the head of public schools are included schools established by the local authorities and private (clerical) schools adopted as public schools. The proportion of the latter to the whole number of public schools was 22 per cent in 1876–77; in 1891–92 it had fallen to 10 per cent, and in 1901–2 to 5 per cent.

The private primary schools are either secular schools or schools belonging to the religious orders. In 1902 the latter formed 85 per cent of all private primary schools. As a rule, moreover, the teachers of the private secular schools are in close relations with their clerical superiors. Hence the statistics showing the distribution of pupils in the several classes of schools (Tables II and III) taken alone do not indicate the full strength of the clerical influence. They should be studied in connection with the statistics showing the classification of teachers (Tables IV–VI).

[a] Derived from Annuaire Statistique, 1904, and report of M. Massé to the Chamber of Deputies on the budget of 1906.
[b] The latest of these official reports are as follows: Statistique de l'enseignement primaire, 1901–2; Statistique de l'enseignement secondaire des garçons, 1887, Statistique de l'enseignement supérieur, 1889–1899.
[c] Report of M. Massé, chairman of the financial committee of the Chamber of Deputies, on the budget for 1906, p. 13.
[d] See Report of the Commissioner of Education for 1903, vol. 1, p. 591.
[e] Report of M. Massé, table, pp. 3-12.
[f] For the list of special schools sharing in the appropriation for higher education, see pp. 81, 82.

Enrollment.—Table II shows the enrollment in the different classes of primary schools for selected years from 1837 to 1902–3 inclusive.[a] The sixty-seven years included in this survey cover practically the entire period during which the education of the masses has been accepted as a public obligation. The law of 1833, Guizot's law, as it is named from its distinguished author, minister of public instruction under Louis Philippe, made it obligatory upon every commune to maintain at least one primary school, which might be either an adopted parochial school or a school established by the communal authorities. The first official report showing the effects of this law was published in 1837, at which date above 75 per cent of the elementary pupils were in schools classified as public. In 1843 the classification of schools as secular and belonging to the religious orders, was also employed in the reports, and the same has ever since been retained. The statistics, therefore, indicate not only the progress in respect to the public support of primary education, but the relative strength of the two opposing policies in respect to the control of primary schools—namely, control by the State as against control by the church. After the passage of the Falloux law of March 18, 1850, which favored clerical schools, the enrollment in the latter schools steadily increased, reaching its maximum, 44 per cent of the total, in 1876–77, just before the newly established republic entered actively upon its educational work. The first measures adopted by the Republic related to the provision of schoolhouses (law of 1878 creating a fund of 120,000,000 francs ($24,000,000) for this purpose) and the preparation of an adequate teaching force (law of 1879 providing for the establishment of a normal school for women in every department). There followed in rapid succession the laws of 1881 requiring teachers to be provided with State diplomas and making public schools free; the law of March 28, 1882, making public schools strictly secular and obliging parents to secure the instruction of their children; and the law of October 30, 1886, which prescribed minutely the details of school administration, school programmes, etc., and provided for the gradual elimination of clerical teachers from all public schools. The effects of this law are indicated in the steadily increasing enrollment in private (chiefly clerical) schools after 1886 down to the last year of the period reviewed (1902–3), when the Government, under sanction of the law of 1901 relative to the religious associations, had begun the work of eliminating them entirely from the educational field.

From Table III, showing the proportion of children enrolled in the different classes of schools at specified dates during the period reviewed, it will be seen that there was a transfer of pupils from public to private schools after 1886, as the elimination of clerical teachers from the former schools proceeded. Five years were allowed for the exclusion of clerical teachers from the schools for boys, but no limit was fixed to the time in the case of schools for girls.

TABLE III.—*Proportion of total enrollment in different classes of primary schools at dates specified.*

Year.	Public.	Private.	Secular.	Schools of religious orders.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
1837	76	24	.....	.....
1850	78.3	21.7	71.2	28.8
1866	78.3	21.7	62.4	37.6
1877	81	19	56	44
1881–82	81.6	18.4	66.8	33.2
1887–88	79.9	20.1	69.5	30.5
1891–92	77.1	22.9	70.1	29.9
1896–97	75.7	24.3	70.7	29.3
1901–2	75.23	24.77	72.79	27.21
1902–3	77.60	22.40	79.88	20.12

[a] The years selected were marked either by the passage of important school laws or by the issue of a volume of the series of official reports, which have appeared regularly at five-years' interval since 1876–77.

By reference to Table II it will be seen that the total enrollment in primary schools, which decreased quite steadily from 1886–87 to 1900–1901, inclusive, showed decided increase in 1901–2. Omitting Algiers, the enrollment in France alone for the last year specified was 5,433,302, a gain of 6,091, or 1 per cent, since 1891–92. This increase seems to indicate that recent measures for enforcing the compulsory school law have had effect.

Average attendance.—The item of average attendance, which is generally regarded as a better index of the true state of school attendance than enrollment, is wanting in the official report of French schools. It is customary, however, to compare the actual attendance on a specified day in June and December—the months of the lowest and highest attendance—with the total enrollment for those months. It appears from the comparison on this basis that the school attendance on December 2, 1901, was 79.3 per cent of the month's enrollment, and that the school attendance on June 2, 1902, was 74.9 per cent of the month's enrollment.

The entire school enrollment for 1901–2 (5,550,284) was equivalent to 14.24 per cent of the total population (census of 1901). Remembering that the ratio of the legal school population of France (ages 6 completed to 13 completed) to the whole population (38,961,945, census of 1901) is smaller than in the other leading countries (in 1896 it stood at 12.12 per cent), the ratio of school attendance is seen to be comparatively high.

The following statistics are presented in evidence of recent increase in school attendance:

	Enrollment.	
	1901–2.	1902–3.
Public schools:		
December	3,230,526	3,317,889
June	3,049,575	3,130,733
Private schools:		
December	1,155,898	1,049,810
June	1,135,834	987,740

According to this showing the public schools in December, 1902, had an excess of 87,000 pupils over the number in December, 1901, and in June, 1903, an excess of 81,000 over the number for the preceding June.

Higher primary schools.—In the category of primary schools are included the higher primary schools, which numbered 302 in 1901–2, having a total enrollment of 34,563 pupils (23,257 boys and 11,306 girls). The public schools of this grade greatly outnumber the private schools, the former enrolling 34,084 pupils against 479 in the latter.

If to the enrollment in the higher primary schools be added the pupils in advanced classes (cours complémentaires), which are attached to many primary schools, the total enrollment of pupils in the schools and classes called higher primary is raised to 68,611. The requirement for admission to these higher schools is possession of the certificate of primary studies—which can not be obtained by a child under 12 years of age—or the passing of an examination proving equivalent attainments, which is not open to children under 13 years of age. The regular course of the higher primary schools is three years, but a fourth year is allowed.

In Paris, which is credited with 11,931 pupils in higher primary schools (included in the total enrollment already given), and in Lyon, Havre, and a few other cities, the schools of this class are more highly developed than elsewhere, and are comparable with the scientific or modern divisions of the high schools in the chief cities of our own country. In general, however, the higher primary schools of France may be compared with the grammar grades and the two lower classes of American high schools. The most advanced of the French higher primary schools give greater prominence to

the industrial applications of theoretic knowledge than any class of high schools in the United States.[a]

The teaching force.—The efforts to secularize the public primary schools have naturally affected the general character of the teaching force, which until a very recent date comprised a certain proportion of clerical teachers. After the passage of the law of 1886, prohibiting the further employment of teachers of this class in the public schools, the number of teachers in private schools increased, as will be seen by reference to Table V. The effect of the law of 1901, depriving the religious orders of their liberty in respect to teaching, was discernible before the close of the year 1901–2 in a slight increase in the proportion of secular teachers. By reference to tables V and VI it will be seen that men belonging to religious orders have been entirely excluded from the teaching force of public primary schools, and that the proportion of women teachers belonging to religious sisterhoods is rapidly declining. It should be explained that nearly all the private secular schools have clerical affiliations, and hence immediately after the passage of the law relative to the associations a transfer took place of teachers and also of pupils from private clerical to private secular schools.

TABLE IV.—*Number and classification of teachers of primary schools at specified dates.*

Year	Total number teachers.	Men	Women.	Men and women.	
				Public schools.	Private schools.
1837	59,735	39,302	20,433	38,465	21,270
1872	110,238	50,649	59,589	75,062	35,176
1876–77	110,709	51,717	58,992	80,063	30,646
1881–82	124,965	58,137	66,828	88,220	36,745
1886–87[a]	138,655	64,039	74,616	98,769	39,886
1891–92	146,674	66,363	80,311	102,486	44,188
1896–97	152,277	67,339	84,938	105,774	46,503
1901–2	159,073	68,111	90,962	108,614	50,459
1902–3	156,184	67,516	88,668	109,845	46,339

[a] For this and for subsequent years Algiers included.

TABLE V.—*Lay and clerical teachers.*

PUBLIC SCHOOLS.

	1886–87.	1891–92.	1896–97.	1901–2.	Increase (+) or decrease (−) 1886–87 to 1901–2.
Men:					*Per cent.*
Lay	53,072	55,559	56,373	56,705	+ 6.82
Belonging to religious orders	2,544	132			−100.00
Total	55,617	55,691	56,373	56,705	+ 1.95
Women:					
Lay	29,687	35,446	40,385	46,212	+ 54.62
Belonging to religious orders	13,265	11,349	9,013	5,697	− 57.05
Total	43,152	46,795	49,398	51,909	+ 20.29
Grand total	98,769	102,486	105,774	108,614	+ 9.96

[a] For a detailed account of the higher primary schools, including typical programmes, see Report of the Commissioner for 1903, Vol. I, Chap. XIII, pp. 606–611.

TABLE V.—*Lay and clerical teachers*—Continued.

PRIVATE SCHOOLS.

	1886–87.	1891–92.	1896–97.	1901–2.	Increase (+) or decrease (−) 1886–87 to 1901–2.
					Per cent.
Men:					
Lay	1,842	1,423	1,278	1,224	− 33.55
Belonging to religious orders	6,580	9,249	9,685	10,182	+ 54.58
Total	8,422	10,672	10,963	11,406	+ 35.43
Women:					
Lay	6,923	6,186	5,500	5,181	− 25.16
Belonging to religious orders	24,541	27,330	30,040	33,872	+ 32.61
Total	31,464	33,516	35,540	39,053	+ 24.12
Grand total	39,896	44,180	46,503	50,459	+ 26.47

TABLE VI.—*Proportion of lay and of clerical teachers for the years specified.*

	Public schools.				Private schools.			
	1886–87.	1891–92.	1896–97.	1901–2.	1886–87.	1891–92.	1896–97.	1901–2.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
Men:								
Lay	95.42	99.8	100.00	100.00	21.87	13.33	11.65	10.73
Belonging to religious orders	4.58	.2	.....	.....	78.13	86.70	88.35	89.27
Women:								
Lay	69.26	75.74	81.75	89.02	22.00	18.45	15.47	13.27
Belonging to religious orders	30.74	24.26	18.25	10.98	78.00	81.55	84.53	86.73

Qualifications of teachers.—Of greater general interest than the changes in the teaching force, due to political conditions peculiar to France, are the official statements indicating the professional qualifications and the financial status of the teachers.

The high degree of scholastic attainments and of professional training on the part of the teachers is one of the most important results of the great efforts made by the Government in behalf of popular education. The official report shows that all the men and about 96 per cent of the women at the head of primary schools are possessed of State diplomas. Of assistant teachers—that is, teachers in charge of a class—the proportion possessed of a State diploma is, for men, 98.29 per cent; for women, 93.25 per cent. Moreover, the great majority of the teachers, 67 per cent of the men and 68 per cent of the women, had obtained the higher of the two required diplomas. The few men not having a State diploma (in all, 547) were possessed of a university degree.

It should be further noted that the teachers are classed as probationers (stagiaires) and full teachers (titulaires). In order to be appointed as a full teacher one must be provided with a special diploma (certificat d'aptitude pédagogique), which can be obtained only by examination after a period of two years' service as a teacher. In 1902 the number of teachers provided with this certificate was 62,820 (33,369 men and 29,451 women), equivalent to 40 per cent of the teaching force.

The remarkable progress made by France in securing trained teachers for its public schools is due in great measure to the liberal provision of normal schools and the high standard at which these are maintained. Every department has complied with the law requiring the establishment of two normal schools, one for men and the other for women, or has been authorized to combine with another department for this purpose. The number of primary or departmental normal schools in 1903 was 171--namely, 87 for men with 4,421 students and 84 for women with 4,741 students. The State shows its solicitude in this matter by the maintenance of two superior normal schools, one for men at St. Cloud, the other for women at Fontenay-aux-Roses, in which professors are

trained at public expense for the primary normals. The former has an annual attendance of 35 or 36 students and the latter about 50 students. These two superior schools are really postgraduate institutions, requiring for admission either the higher diploma of pedagogy or a bachelor's degree.

In addition to the scholastic and professional qualifications required for admission to the teaching service, candidates must be citizens of France, native or naturalized, and, if men, must have attained at least the age of 18; if women, the age of 17.

Salaries of teachers of public primary schools.—Not only is admission to the teaching service carefully guarded, but the rate of salary allowed by the State for each grade of the service and the conditions of promotion from grade to grade are fixed by law.

By law of July 19, 1889, the full teachers (titulaires) were divided into five classes, the percentage of the whole number of teachers in each class and the salaries allowed for each being definitely established. Recent investigations have shown that the salaries allowed by the State are too low to enable teachers to meet the necessities of life, especially where little or no addition is to be looked for from local sources; and further, that the rigid limit of the proportion of teachers in each class (le pourcentage) virtually deprived the great body of teachers of the hope of advancement to the higher grades.[a] These unfortunate conditions have been somewhat improved by a slight increase in the annual salaries allowed probationers and fifth-grade teachers, 100 francs ($20) each, and by abolishing the system of percentage. Henceforth teachers in each grade below the second are entitled to promotion to the next higher after a specified term of service passed in the lower grade. For promotion from the fifth to the fourth grade and from the fourth to the third the required term of service is five years; from the third to the second, six years, the candidates being advanced in the order of their seniority (laws of March 31 and December 30, 1903).

The salaries allowed by the State for teachers of elementary primary schools under the new regulations are as follows:

Class.	Male teachers.		Female teachers.	
	French currency.	U. S. currency.	French currency.	U. S. currency.
	Francs.		*Francs.*	
Probationers	1,000	$200	1,000	$200
Fifth	1,100	220	1,100	220
Fourth	1,200	240	1,200	240
Third	1,500	300	1,400	280
Second	1,800	360	1,500	300
First	2,000	400	1,600	320

Principals in charge of a school receive additions to the fixed salary of the grade to which they belong, as follows: If in charge of a school of three or four classes, $40 per annum; if more than four classes, $80.

The salaries of teachers of the higher primary schools, which were slightly increased by the financial law of April 22, 1905, are as follows:

Class.	Higher primary schools.			
	French currency.		U. S. currency.	
	Former salaries.	New salaries.	Former salaries.	New salaries.
	Francs.	*Francs.*		
Fifth	1,800	2,000	$360	$400
Fourth	2,000	2,300	400	460
Third	2,200	2,600	440	520
Second	2,500	2,800	500	560
First	2,800	3,000	560	600

[a] For detailed account of these investigations see the Report of the Commissioner for 1902, Chap. XV, pp. 710–719.

In addition to the salaries provided by the State, every commune is required by law to provide a residence for the head teacher of its public school (in the smaller communes an assistant teacher, if there is one, is generally the wife or sister of the principal), or its money equivalent, and a commune may increase the salary. Outside of the large cities, however, the local increase of salaries is seldom granted without the requirement of other teaching. The rural school teacher is expected to act as secretary to the mayor of his commune, whose office is generally on the school premises. For this service he may, and often does, receive compensation.

The proportion of teachers, however, whose income from all possible sources is enough to insure a comfortable living is small. Recent investigations already referred to showed that out of 3,462 teachers whose incomes were ascertained only 312 received from all sources above 3,000 francs ($600) a year; 1,070, from 2,001 francs to 3,000 francs ($400 to $600); and 1,079, from 1,501 francs to 2,000 francs ($300 to $400).

Once appointed titulaire (full teacher), the primary school teacher has practically a life tenure of his position, as he can only be removed for immorality or incompetence. The teacher may, however, be transferred from one place to another without warning or consultation, and this is often done for political or personal reasons; the evil, indeed, has become so great that legislative measures are pending which promise the teacher greater security in the position to which he may be assigned.

As members of the civil service, teachers are carried on the pension list and may demand their retirement at 55 years of age if they have twenty-five years' service to their credit. The years passed in the normal school after the student reaches 20 years of age count toward the pension. The rate of pension is based on the average of the teacher's salary for the last six years of service. For twenty-five years' service the pension is reckoned at 50 per cent of the average, with one-fiftieth for every year's extra service. The pension can not be lower than 600 francs ($120) per annum for men and 500 francs ($100) for women. Hitherto the annual appropriations for pensions have not sufficed to prevent the block in promotions. For the last two years the Government has made special appropriations, with a view to increasing the number of pensioners and thus making way for teachers entitled to promotion.

To complete the view of the nominal advantages offered by the teaching career, it should be added that the required term of military service (three years) is reduced to one year for teachers. Until recently teachers were exempt from military service, and the sons of rich peasants, it is said, often entered the normal school to escape military service; but zealous teachers complained of a privilege which seemed to put a stamp of effeminacy upon their profession and which also drew to it men having no real interest in the work. The one year's service was accorded in response to this spirit of patriotic and professional pride, but it has not proved very satisfactory, as the great body of those affected would prefer to serve the full three years rather than be marked off from their comrades by a term of one year.

An additional privilege accorded to primary teachers is that of free tuition for their sons in the national lycées and colleges (law of 1900), and they have the right to travel by rail at half the regular fare.

MOVEMENTS FOR PROLONGING THE EDUCATION OF THE PEOPLE AND FOR PROMOTING THE SOCIAL WELFARE OF THE YOUNG.

The obligatory period of primary instruction extends from the sixth to the thirteenth year, but a child who passes the examination for the certificate of primary studies is exempt from the obligation to attend school. Candidates may be admitted to this examination at 11 years of age, and in fact a large proportion of those who seek the certificate do so at that early age; hence the very means taken to increase the interest of pupils tends to shorten their school term. The majority of the children leave school at an earlier age than 13, and even for those who pass the whole obligatory

period in school the wholesome restraints of instruction and constant supervision are too soon removed. It is also true in France, as in other countries, that elementary instruction, by its natural limitations, does not leave the same lasting effect upon the character or furnish the same intellectual resources as higher education.

The condition of the young people of the laboring classes thrown upon the world with meager attainments and without preparation for any particular industry has long excited the serious attention of the Government and of public-spirited, earnest men and women throughout the country. The recent vigorous movement for extending the provision for adult education is the outcome of this solicitude. The Government, which has given substantial aid to the cause, in 1895 ordered a special investigation, with a view to obtaining complete information as to the status of the work and to determining the means for extending and improving it. This commission was intrusted to M. Édouard Petit, a professor in one of the Paris lycées and an indefatigable promoter of the cause of adult education. He found teachers and professors everywhere alive to the importance of the effort and ready to give their aid in establishing and maintaining classes. Numerous private societies entered into the work with great spirit, and in 1895 the Havre Society for Instruction by Objects (enseignement par l'aspect) celebrated its fifteenth anniversary by calling a congress of all the societies engaged in promoting popular education to consider the subject of the systematic instruction of adults and adolescents. The minister of public instruction presided over the congress, and the resolutions of this body have shaped in a measure the subsequent official regulations. These schools and classes, which are held generally in the evening, sometimes on Sunday, offer courses of instruction for illiterates, review courses, and continuation courses. The last named have usually a technical or industrial character, and prepare the student, especially in the rural communities, for agriculture and other pursuits. The local adaptation of the courses is carefully studied, and also their relation to the age and economic condition of the students. Civic instruction has a large place in the programmes, and the subject is much more thoroughly treated than is possible in the primary schools. The students in general show deep and earnest appreciation of the opportunities thus offered. The growth of the work is indicated by the following statistics:

Year.	Number of courses of lectures.			Number of attendants registered.	Number of regular attendants.		
	For men.	For women.	Total.		Men.	Women.	Total.
1895-96	13,920	1,808	15,728	400,000	.....	.....	270,500
1896-97	20,099	4,429	24,528	700,000	340,926	68,555	409,481
1897-98	22,939	7,429	30,368	850,000	378,196	104,711	482,907
1900	.....	.....	38,291	.....	.....	.....	540,000
1901-2	28,703	14,341	43,044	.....	.....	.....	.....
1902-3	29,074	15,354	44,428	.....	.....	.....	.....

Various efforts for promoting the social well-being of young people have grown out of this movement for their continued education. Among these are the formation of mutual aid associations and of friendly societies (petits amis). The former increased from 10 associations in 1896 to 1,600 in 1900. They included 12,000 schools and 450,000 young members in 1900 and 13,000 schools in 1902–3, with 556,000 contributing members.

The friendly associations are intended to maintain the spirit of comradeship and the interests that are begun in the school days, but further than this they serve as a means of interesting the young men and women who have passed out of the schools in the children who have taken their places as pupils. The idea that society in general must make itself responsible for the rising generation beyond the mere matter of their school training is steadily gaining ground in France, and other agencies besides the

associations of former pupils are entering heartily into the work. For this purpose numerous associations (patronages scolaires) have been formed to watch over the moral and material welfare of young people after they are out of school. The efforts of these societies take the very practical forms of finding suitable work for the young, shielding them from demoralizing influences, and extending their education in practical directions. The number of societies of this kind rose from 34 in 1894–95, when the movement began, to 1,663, in 1903. Teachers and school officers unite with representative people in different walks of life to promote the work, which is also fostered by public funds. For the year under review 2,200,000 francs ($440,000), including 950,000 francs ($190,000) from Paris, were appropriated from local funds, and the public treasury made a small appropriation, 300,000 francs ($60,000), for the same purpose.

Among the legal measures adopted in view of the compulsory school law is the requirement that every commune shall maintain a fund to supply the necessities of life to very poor children. This requirement has never been fully enforced, but the number of communes meeting the obligation steadily increases. In 1902 funds of the nature indicated were maintained by nearly half the communes in France, viz, 17,439, on a total of 36,551. The disbursements from the funds amounted to $1,340,077.

EXPENDITURE FOR PUBLIC PRIMARY EDUCATION.

The expenditure for public primary education is met by the State, the department (corresponds to county), and the commune (city, town, or rural district). The State bears the larger proportion of the expenses (about two-thirds), while the departments do not contribute to the current obligatory expenditure, their responsibility extending only to the appropriation of funds for the payment of the overseers of school workshops and of practical specialists appointed to give instruction in agriculture, commerce, and industry. The only obligatory expenses left to the communes are the cost of site and school building, school furniture and equipments, heating and lighting school premises, residence for the teacher, wages of a servant employed to look after the children in the infant school, of the care taker for the primary school, and the salaries of sewing teachers and other special teachers employed by the local authorities. The State pays the salaries of teachers fixed by law and bears the expense of inspection and of all administrative service. The amount disbursed from the State treasury for primary education is derived from a school tax, which by law of July 14, 1889, was fixed at 8.12 per cent of the revenue from the four direct taxes levied by the State for general purposes. The amount thus raised is turned into the public treasury. The cities having more than 150,000 inhabitants (namely, Lille, Bordeaux, Lyon, Marseille, and the city of Paris) meet the entire expenditure of their primary schools from the school tax levied upon them. The State simply appropriates to the former four a sum equal to the school tax which they pay, i. e., equal to the product of 8 per cent on the four direct taxes, and to Paris a sum equal to 4 per cent, or less than the amount of its school tax.

The expenditures for primary schools are classed as obligatory, optional, and divers. The obligatory expenditures are current and extraordinary, the latter being for purchase of sites and construction of school buildings. Under the head of divers expenditures are included the cost of evening schools or other special instruction for adults, funds for aiding teachers, scholarships and prizes for worthy pupils, library funds, etc.

TABLE VII.—*Total current expenditures for public primary schools.*

Year.	Total expenditures.		Proportion from each contributory source.		
	French currency.	U. S. currency.	State.	Departments.	Communes.
	Francs.		*Per cent.*	*Per cent.*	*Per cent.*
1877	94,397,554	$18,879,510	25	18	57
1881–82	132,314,010	26,462,802	66.25	13.22	20.53
1886–87	172,900,515	34,580,103	48.80	10.50	40.90
1891–92	186,306,075	37,261,215	67.60	.....	32.40
1896–97	214,015,250	42,803,050	67.02	.....	32.98
1900 [a]	223,966,253	44,793,250	67.5	.....	32.5
1902	236,598,969	47,319,793	65.5	.....	34.5

[a] The expenditure for 1900, as given in the Commissioner's Report for 1903, did not include the expenditure for Algiers, which information was not available at the time.

TABLE VIII.—*Expenditure per capita for years specified.*

Year.	Per capita of population.		Per capita of enrollment in public primary schools (infant schools included).	
	French currency.	U. S. currency.	French currency.	U. S. currency.
	Francs.		*Francs.*	
1877	2.55	$0.51	23.45	$4.69
1881–82	3.51	.70	30.25	6.05
1886–87	4.52	.90	34.85	6.97
1891–92	4.82	.96	39.26	7.85
1896–97	5.55	1.11	46.00	9.20
1900 [a]	5.74	1.14	48.51	9.70
1902	6.07	1.21	50.98	10.19

[a] The expenditure per capita of population is estimated upon the census population of 1901, viz, 38,961,945.

The total appropriation by the State for education in 1902 was 215,980,619 francs ($43,196,123). Of this amount, primary education received 155,098,452 francs ($31,019,690), about 72 per cent.

The total expenditure for primary education in 1902 was distributed as follows:

	French currency.	U. S. currency.	Per cent of total.
	Francs.		
For inspection of primary schools	2,304,492	$478,893	1.01
Obligatory expenditures for primary schools	195,005,457	39,001,091	82.39
Optional and extra expenditures for primary schools	30,978,888	6,195,777	13.09
Expenditure for primary normal schools	8,220,132	1,644,026	3.51
Total	236,598,969	47,319,792	.....

The foregoing statement relates wholly to current expenditures; in order to complete the record of what the State has done for primary schools, it is necessary to consider the amount of money that has been contributed from the public treasury for the construction of schoolhouses. The policy adopted in 1878 of aiding communities in the effort to meet the law in this respect, either by subventions or by loans from the public treasury, has been continued to the present time. The amount of money thus appropriated during the last half decade reported is shown in the following statement:

TABLE IX.—*Appropriations by the State for building schoolhouses.*

Year.	Amount allowed by the legislature.		Amount actually appropriated.		Number of communes aided.
	French currency.	U. S. currency.	French currency.	U. S. currency.	
	Francs.		*Francs.*		
1898	6,300,000	$1,260,000	6,055,060	$1,211,012	742
1899	6,200,000	1,240,000	6,066,330	1,213,266	784
1900	6,200,000	1,240,000	6,027,405	1,205,481	733
1901	6,000,000	1,200,000	5,885,390	1,177,078	762
1902	6,000,000	1,200,000	6,207,225	1,241,445	796

From the 1st of January, 1898, to the 31st of December, 1902, the total expenditure for the construction or the enlargement of school buildings,[a] not including normal schools, was 81,850,927 francs ($16,370,185), of which amount the State contributed 36.95 per cent. The total amount expended in the construction of school buildings from June 1, 1878, to December 31, 1902, was 718,663,062 francs ($143,732,612). This total does not include the expenditure by the large cities (Paris, Marseille, Lyon, Bordeaux, Lille), whose accounts in this respect are not under the supervision of the State.

The expenditure for building purposes during the half decade 1898–1902, as given above, does not include the expenditure for buildings for normal schools, which amounted to 716,144 francs ($143,228), of which the State appropriated a little more than half, viz, 369,750 francs ($73,950). The entire expenditure for the construction of buildings for normal schools from 1879 to 1903 reaches the sum of 52,821,180 francs ($10,564,236). This raises the total expenditure for building purposes for the public schools under the control of Government in the twenty-four years since the Republic entered actively upon this work (1879–1903) to 771,484,242 francs ($154,296,848). It is estimated by the official statistician that the corresponding expenditure by Paris and the four other cities which have borne the entire cost of this work without aid from the State, would raise the above total for building purposes to 1,000,000,000 francs ($200,000,000).

PRACTICAL RESULTS OF ELEMENTARY EDUCATION.

The official report calls attention to the diminishing ratio of illiterates as proof of the ever-increasing success of the efforts put forth by the French Government to insure that every child shall acquire at least the elements of knowledge. The proportion of conscripts unable to read and write, which was 14.4 per cent in 1880, had fallen to 4.5 per cent in 1901 and to 4 per cent in 1903. The proportion of the newly married unable to sign the marriage register fell from 16.1 per cent in 1880 to 4.4 per cent in 1901 for men, and in the same period, from 24.5 per cent to 6.3 per cent for women.

It is noticeable further that there is a steady advance in the number of children who pass the examination for the certificate of primary studies. This number rose from 36,841 in 1877 to 186,031 in 1897, and to 206,930 in 1902.

Attention is also called to the increasing interest in reading on the part of school children and their parents, and the disposition to supply professional literature to teachers. The following statistics show the status of school libraries and teachers' libraries (France and Algiers) for the years named:

	1897.	1902.
School libraries	41,498	43,411
Total volumes	6,190,973	6,977,503
Volumes loaned	7,219,438	8,082,930
Teachers' libraries	2,748	2,674
Total volumes	1,116,523	1,034,132

[a] The number of buildings erected in this period was 2,151, and the number of old buildings secured or enlarged 1,945. The average cost of each building was 29,438 francs ($5,887); of each separate school (grade or division under its own teacher), 15,685 francs ($3,137); of each school place, 320 francs ($64).

The circulating library of the Musée Pédagogique has proved of great benefit to teachers by supplying them with professional literature, which aids them in preparation for their examinations. During the five years, 1898 to 1902, the number of volumes loaned to teachers from this library was 11,024. The Musée Pédagogique also promotes the movement for adult education by the distribution of illustrative pictures to be used with the magic lantern. During the lecture season of 1902–3 the number of views loaned from this center was 31,298.

TABLE X.—*Educational statistics of cities of France having more than 100,000 inhabitants.*

INFANT SCHOOLS (ÉCOLES MATERNELLES), 1896–97.

City.	Public schools.			Private schools.		
	Number.	Teachers.	Pupils.	Number.	Teachers.	Pupils.
Paris	149	641	50,731	93	96	10.665
Lyon	40	97	7,563	45	58	5,649
Marseille	27	76	6,885	41	64	4,945
Bordeaux	15	51	4,709	26	52	3,527
Lille	25	69	5,504	33	75	7,934
Toulouse	11	20	1,749	25	35	2,928
St. Etienne	25	70	5,242	17	32	2,572
Roubaix	12	37	5,267	20	29	3,921
Nantes	8	17	1,340	6	8	379
Havre	15	46	4,009	1	2	80
Rouen	8	21	1,472	10	15	1,276
Rheims	13	36	5,545	11	23	2,301
Total	348	1,181	100,016	328	489	46,477

ELEMENTARY PRIMARY SCHOOLS, 1896–97.

City.	Public schools.					
	Boys.			Girls.		
	Number.	Teachers (men).	Pupils.	Number.	Teachers (women).	Pupils.
Paris	200	1,654	82,470	186	1,636	70.602
Lyon	53	225	10,631	54	209	9,440
Marseille	71	280	15,661	71	230	11.562
Bordeaux	20	167	8,818	21	131	6,836
Lille	25	139	6,379	24	139	5.116
Toulouse	30	110	4,847	24	86	3,849
St. Etienne	26	130	5,811	26	105	4.698
Roubaix	15	86	6,206	12	63	4,321
Nantes	13	55	3,346	13	64	3,054
Havre	12	116	5,477	12	100	4,757
Rouen	9	69	3,396	12	84	4,059
Rheims	13	68	4,344	15	62	4,066
Total	487	3,199	157,386	470	2,909	132,354
	Private schools.					
Paris	151	553	28,668	643	2,331	58,724
Lyon	71	259	7,450	154	477	11,218
Marseille	80	240	8,047	207	623	13,222
Bordeaux	23	97	4,182	92	351	8,828
Lille	28	140	6,654	44	351	9,015
Toulouse	16	61	2,659	77	263	5,445
St. Etienne	17	91	3,521	42	181	4,839
Roubaix	9	63	3,125	21	121	4,590
Nantes	16	65	3,349	45	194	4,801
Havre	5	30	1,608	24	110	3,414
Rouen	12	48	2,102	45	194	4,323
Rheims	13	47	2,841	28	146	4,146
Total	441	1,694	74,204	1,402	5,342	132,565

TABLE XI.—*Educational statistics of cities of France having more than 100,000 inhabitants.*

INFANT SCHOOLS (ÉCOLES MATERNELLES), 1901-2.

City.	Public schools.			Private schools.		
	Number.	Teachers.	Pupils.	Number.	Teachers.	Pupils.
Paris	167	784	53,779	57	103	9,241
Marseille	31	96	8,476	32	37	4,488
Lyon	42	117	10,337	25	43	2,533
Bordeaux	17	62	4,978	26	51	3,269
Lille	26	73	5,313	32	73	7,629
Toulouse	16	30	2,715	24	35	2,360
St. Etienne	27	77	5,946	16	29	2,295
Roubaix	13	40	5,119	13	26	3,006
Nantes	8	18	1,515	6	7	377
Havre	16	49	4,357	1	2	60
Rouen	8	20	1,564	11	18	1,465
Rheims	13	39	5,460	11	18	1,842
Nice	5	14	1,949	5	5	141
Nancy	15	45	3,332	1	2	80
Toulon	10	20	2,249	7	9	768
Total	414	1,484	117,089	267	458	39,554

ELEMENTARY PRIMARY SCHOOLS, 1901-2.

City.	Public schools.					
	Boys.			Girls.		
	Number.	Teachers (men).	Pupils.	Number.	Teachers (women).	Pupils.
Paris	202	1,799	86,958	197	1,781	74,878
Marseille	74	326	19,224	74	270	13,558
Lyon	54	236	12,622	54	233	12,261
Bordeaux	20	177	9,292	21	137	7,745
Lille	25	143	6,850	25	137	5,613
Toulouse	29	115	5,627	25	92	4,340
St. Etienne	25	136	5,933	26	118	5,119
Roubaix	15	93	6,071	14	81	4,915
Nantes	13	66	4,245	12	60	3,444
Havre	13	131	6,555	13	118	5,982
Rouen	9	76	3,663	12	87	4,081
Rheims	15	80	4,546	16	70	4,221
Nice	21	89	4,942	18	79	3,803
Nancy	12	55	2,903	12	47	2,139
Toulon	6	57	3,367	14	66	3,560
Total	533	3,579	182,798	533	3,376	155,659
	Private schools.					
Paris	126	573	22,081	560	2,285	57,420
Marseille	74	205	7,901	196	700	13,566
Lyon	69	262	7,155	139	465	8,874
Bordeaux	22	93	3,541	85	350	7,840
Lille	26	134	6,389	42	293	6,950
Toulouse	16	64	2,474	73	255	5,016
St. Etienne	16	90	2,894	40	187	4,294
Roubaix	10	66	2,827	19	119	4,607
Nantes	17	80	3,725	47	221	6,048
Havre	4	28	1,142	21	125	2,389
Rouen	12	48	1,611	43	214	4,274
Rheims	13	46	2,130	23	115	3,687
Nice	5	14	511	36	120	2,916
Nancy	14	45	1,945	31	106	3,731
Toulon	8	26	812	39	95	2,647
Total	432	1,774	67,138	1,401	5,654	13,425

TABLE XII.—*Enrollment in elementary primary schools in cities of more than 100,000 inhabitants in 1891–92, 1896–97.*

City.	1891–92.			
	Population.	Enrollment.		
		Public.	Private.	Total.
Paris	2,477,957	150,327	92,155	242,482
Marseille	403,749	22,518	20,113	42,631
Lyon	416,029	20,678	19,764	40,342
Bordeaux	252,415	[a] 14,330	[a] 13,635	27,965
Lille	201,211	[b] 11,625	[b] 10,636	22,261
Toulouse	149,791	9,108	8,278	17,446
St. Etienne	122,750	10,485	7,946	18,431
Roubaix	133,443	11,691	8,303	19,994
Nantes	112,352			
Havre	116,309	8,856	4,688	13,544
Rouen	114,917	7,563	6,998	14,561
Rheims	104,186			

City	1896–97.				Increase or decrease, 1891–92, 1896–97
	Population.	Enrollment.			
		Public.	Private.	Total.	
Paris	2,536,834	153,072	87,392	240,464	−2,018
Marseille	442,239	27,532	21,269	48,801	+6,170
Lyon	466,028	19,801	18,668	38,469	−1,873
Bordeaux	250,906	15,654	13,010	28,664	+ 699
Lille	216,276	11,405	15,699	27,104	+4,993
Toulouse	149,963	8,097	8,104	16,201	− 645
St Etienne	136,030	10,309	8,360	18,869	+ 438
Roubaix	124,661	10,864	7,715	18,579	−1,415
Nantes	123,902	6,122	7,771	13,893	
Havre	119,470	10,234	4,988	15,222	+1,678
Rouen	113,219	7,455	6,839	14,294	− 267
Rheims	107,962	8,444	6,987	15,431	

City.	1901–2.				Increase or decrease, 1896–97, 1901–2.
	Population.	Enrollment.			
		Public.	Private.	Total.	
Paris	2,714,068	161,836	79,501	241,337	+ 873
Marseille	491,161	32,782	21,467	54,249	+5,448
Lyon	459,099	24,883	16,029	40,912	+2,443
Bordeaux	257,638	17,037	11,381	28,418	+ 246
Lille	210,896	12,403	13,339	25,802	−1,302
Toulouse	149,841	9,957	7,490	17,457	+ 656
St. Etienne	146,550	11,052	7,188	18,240	− 629
Roubaix	142,365	10,486	7,434	17,920	− 659
Nantes	132,990	7,699	9,773	17 492	+3,599
Havre	130,196	12,537	3,531	16,068	+ 846
Rouen	116,316	7,744	5,885	13,629	− 665
Rheims	108,385	8,767	5,817	14,584	− 847
Nice	105,109	8,745	3,427	12,172	
Nancy	102,559	5,042	5,666	10,708	
Toulon	101,602	6,927	3,459	9,386	

[a] 1890. [b] 1893.

TABLE XIII.—*Educational statistics of cities of France having more than 100,000 inhabitants.*

HIGHER PRIMARY SCHOOLS, 1896-97.

City.	Boys.			Girls.		
	Schools.	Teachers (men).	Pupils.	Schools.	Teachers (women).	Pupils.
Paris	13	544	4,917	8	229	2,371
Lyon	3	16	633	3	14	499
Marseille	2	10	317	2	10	286
Bordeaux	1	8	224	1	8	249
Lille	1	11	315	1	11	308
Toulouse	1	8	326	.....	.....	.....
St. Etienne	1	8	157	1	10	195
Roubaix	1	12	333	1	11	139
Nantes	1	19	163	.....	.....	.....
Havre	1	8	189	1	8	190
Rouen	1	7	245	1	8	211
Rheims	1	21	230	1	7	160
Total	27	672	8,049	20	316	4,608

HIGHER PRIMARY SCHOOLS, 1901-2.

City.	Boys.			Girls.		
	Schools.	Teachers.	Pupils.	Schools.	Teachers.	Pupils.
Paris	13	516	6,161	8	218	2,569
Lyon	2	13	491	2	15	465
Marseille	3	13	714	3	14	606
Bordeaux	1	9	259	1	7	320
Lille	1	13	357	1	11	312
Toulouse	1	8	292	.....	.....	.....
St. Etienne	1	10	174	1	13	223
Roubaix	1	13	267	1	12	147
Nantes	1	19	231	.....	.....	.....
Havre	1	8	261	1	7	245
Rouen	1	10	310	1	5	161
Rheims	1	25	284	1	7	166
Nancy	1	22	353	1	11	160
Toulon	1	15	631	1	5	320
Total	29	694	10,785	22	325	5,694

TABLE XIV.—*Expenditures for public primary education in cities having more than 100,000 inhabitants.* [a]

City.	Total expenditure.		Amount contributed in 1902 by—	
	1897.	1902.	State.	City.
First order.				
Paris	$5,721,630	$6,487,549	[b] $569,067	$5,918,482
Second order. [c]				
Marseille	451,792	556,686	115,695	440,990
Lyon	448,000	491,356	120,305	371,051
Bordeaux	210,588	241,589	87,927	153,662
Lille	197,820	260,081	56,892	203,188
Total	1,308,200	1,549,712	380,819	1,168,891

[a] The expenditures for building purposes are not as a rule included.
[b] Subvention equal to the product of 4 centimes additional to the four general taxes; that is, to one-half the school tax levied by the State.
[c] Cities of the second order receive from the State simply a sum equal to the amount of their State school tax.

TABLE XIV.—*Expenditures for public primary education in cities having more than 100,000 inhabitants*—Continued.

City.	Total expenditure.		Amount contributed in 1902 by—	
	1897.	1902.	State.	City.
Third order.a				
Toulouse	$123,870	$127,476	$73,836	$53,640
St. Étienne	178,463	161,084	65,284	95,800
Roubaix	158,856	163,847	65,065	98,782
Nantes	65,176	75,880	35,880	40,000
Havre	169,940	173,008	83,393	89,615
Rouen	115,031	111,112	50,581	60,531
Rheims	93,428	107,934	44,433	63,501
Nice	.....	94,478	47,940	46,538
Nancy	.....	103,316	45,748	57,568
Toulon	.....	86,063	44,480	41,579
Total	904,764	1,204,198	556,440	647,554

a Cities of the third order receive from the State the full amount of the salaries of teachers in their public schools.

SECONDARY EDUCATION.

Lycées and colleges for boys.—The department of secondary education in the French system of public instruction comprises the State lycées and the communal colleges. The lycées for boys, which number 111, are classical colleges of a high order maintained by the State, and intended to prepare the élite youth of the nation, by a well-defined course of liberal education, for entrance upon the specialized university training which leads to professional and official careers. The State appropriates annually a sufficient sum to cover the estimated expenditure for the lycées, and receives through an agent appointed for that purpose the income of the respective lycées derived from board and tuition fees. The departments and municipalities also make appropriations for special expenditures for the lycées.

In 1902 about one-third the pupils attending the lycées (19,666 out of a total of 56,869) were boarding pupils. The total expenditure for the lycées for the year named was 40,733,110 francs ($8,146,622), of which 25,437,457 francs ($5,087,491) were for salaries, school equipment, etc., and the remaining 15,295,653 francs ($3,059,130) for the boarding departments. The State and the municipalities promote attendance upon the lycées by scholarship funds, which cover either tuition fees for day pupils, or tuition and board in full or in part. Including these funds, the income of the lycées in 1902 from the various contributing sources was as follows:

	Francs.	Equivalent in U. S. currency.
State	15,662,285	$3,132,457
Departments and municipalities	1,336,476	267,295
From parents for tuition and board, etc	17,618,184	3,523,636
Other sources	5,975,088	1,195,017
Total	40,592,033	8,118,405

The communal colleges for boys are secondary schools established by the communes (cities and towns) in which they are situated and receiving from the State an annual appropriation to aid in the running expenses. They have, so far as they go, the same programmes as the lycées, but seldom maintain the full complement of classes, as students who intend to work up to the bachelor's degree, the goal of secondary education, generally find it for their interest to finish their studies in some one of the lycées. The 204 colleges of this class enrolled 34,218 pupils in 1902, of which number 12,377 were

boarders; as regards their scholastic classification, 9,358 pupils were in the preparatory divisions, 22,569 in the regular secondary division, and 2,291 in special commercial and agricultural courses.

TABLE XV.—*Enrollment in secondary schools for boys.*

Class of institutions.	1887.[a]	1892.[b]	1893.[b]	1897.[b]	1901.[c]	1903.[d]
State schools:						
Lycées	53,816	52,945	53,974	52,427	54,830	58,593
Colleges	36,086	32,508	32,709	32,412	33,372	35,612
Total	89,902	85,453	86,692	84,839	88,202	94,205
Schools of religious associations:						
Classical	50,085	51,087	51,377	62,188	67,872	60,751
Petits séminaires (preparatory to theological schools	.....	23,948	23,849	22,381	22,328	22,497
Total	50,085	75,035	75,226	84,569	90,200	83,248
Private secular schools	20,174	16,306	14,028	12,813	.....	.....
Total non-State	70,259	91,341	89,254	97,382	.....	.....
Grand total	160,161	176,794	175,937	182,221	.....	.....

[a] From Statistique de l'enseignement secondaire des garçons, 1887, pp. lvi, lxxviii, xcviii.
[b] Rapports faits au nom de la commission du budget, etc.—Service de l'instruction publique, par M. Bouge, 1897, pp. 124, 125; also 1898, pp. 32, 33.
[c] The same, by M. Maurice-Faure, 1902, pp. 443, 445.
[d] Annuaire Statistique, 1903.

The new programmes.—The most important recent event in the history of secondary education in France is the reorganization of the course of study for the lycées (classical colleges). The radical change effected after discussions and efforts extending over a decade is the creation of two divisions without Greek, viz, a Latin-scientific division and a division of Latin and modern languages, to which the same value is given as to the Latin-Greek division. (See full programme in Commissioner's Report for 1903, Vol. I, Chap. XIII, pp. 619–621.)

Since the new programmes have only been in operation a year, it is impossible to form any judgment as to their permanent effects. But certain immediate consequences that have already excited criticism well deserve attention.

In his report to the Chamber of Deputies, M. Simyan, reporter of the committee on appropriations for the service of public instruction, says with reference to the change above specified:

The fact can not be overlooked that the study of Greek is being rapidly abandoned, and in certain of the departmental lycées it threatens to disappear entirely. The majority of families choose for their children instead of the Latin-Greek division either the Latin-scientific or that of Latin and modern languages, which are sufficient to secure admission to a great number of careers. As a consequence, a large majority of the students who under the former system would have pursued the ancient classics now devote a fourth of the time in the first cycle (first four years of the course) and half of the time in the second cycle (last three years), which formerly was given to the study of letters, to other matters whose educational value is certainly much less. In particular, the living languages taught after the modern method are of much less value as an intellectual discipline. This result was foreseen. It was, however, hoped that certain practical advantages would be secured which might compensate for such a sacrifice.

It was hardly anticipated, however, that if the Greek language was dropped the study of Greek literature would be abandoned. * * * Does anyone believe that it is possible to cultivate the minds of young people if they are to be left in ignorance of the poets and the thinkers who have civilized the world, taught men wisdom and beauty, and inspired the imagination of all people? Is it possible to comprehend the origin and the development of Latin and French literature without at least some knowledge of Greek antiquity? The old modern course of the lycée recognized the

importance of imparting some knowledge of Greek literature to the pupils by means of translations. It is to be hoped that the new classical course without Greek will not be less favored and that the minister of public instruction will take measures to overcome this defect.

Another change introduced by the new programmes, which is criticised by M. Simyan, is the reduction of class exercises to one hour instead of two, as under the former plan.

The official decree sanctioning this change left its adoption to the judgment of the academic rector, formed in consultation with the professors of the respective lycées. But in practice the change has been everywhere adopted irrespective of the opinion of the professors.

The reflections of M. Simyan on this point are here quoted, because they afford a very interesting view of the customary conduct of the class exercises in the schools considered:

If one hour is sufficient [says M. Simyan] for certain subjects, as, for example, the living languages and, perhaps, history, for others it is a very bad arrangement, in particular for the higher classes in mathematics and letters (ancient languages). How can a professor of mathematics find the time in a single hour to question every member of the class and to make the necessary explanations? In the classes of letters the difficulty is still greater. When the lesson assigned has been recited or the text of an exercise dictated, there will not remain at the most more than three-fourths of an hour for the correction of a Latin translation or for an exercise in Latin composition or a French composition on a classical subject. Is it possible in this time to explain and comment on a translation, to dwell on difficult points, to examine and correct above 30 exercises, and then to consider the characteristics of the author studied? Impossible in this brief time to correct the Latin compositions showing each pupil his particular errors or to read above 30 compositions in French or to indulge in those literary and moral reflections which constitute the special value of classical instruction.

The difficulty would be less if the classes were not so large, and fewer pupils would be neglected, but in the larger lycées of Paris there are 40 or more pupils in every class. Is it possible for a professor in a single hour to attend to such a number?

It is very evident that the superior council of public instruction, which favored this arrangement, yielded to the opinions of the representatives of the universities without giving sufficient weight to the advice of the professors of the secondary schools, who were better judges in this case. The university professors held that if their students could not listen with attention more than an hour to a lecture the younger students in the lycées were not capable of a longer effort.

But it is an error to compare a lecture which a student must follow closely, taking notes as the professor speaks, with a class exercise which is extremely varied in its character. In the latter, professors and pupils take part one after the other, discussions arise, and the attention of the young students is sustained by this very diversity. If it is held that for hygienic reasons the two-hour period is too long, it is perfectly easy to interrupt it for a few moments' recreation without really shortening the time of the class exercise.

In this same report M. Simyan calls attention to the importance of improving the financial status of the professors of secondary education. In particular, inspired by the success that has thus far attended the efforts of those who have sought to improve the condition of primary teachers, he urges that the policy of fixing a rigid limit to the proportion of professors in each of the six classes shall be abandoned, as the similar policy has been in the case of primary school teachers. As the report of M. Simyan is submitted directly to the legislature, it is highly probable that the reform in this respect will eventually be carried through the department of secondary education. The classes into which the professors of secondary education are divided and their salaries, are at present as follows:

Salaries of professors and instructors in the communal colleges.[a]

Class.	Principals.	Full professors (titulaires).			Professors of drawing.	Censors.	Supervisors.		Répétiteurs (tutors).
		First order.	Second order.	Third order.			First order.	Second order.	
First	$1,100	$740	$600	$540	$400	$1,140	$340	$300	$240
Second	1,020	680	540	480	360	1,040	780	540	300
Third	940	620	500	440	340	960	720	600	280
Fourth	860	580	480	400	320	880	660	500	220
Fifth	780	540	420	360	300	820	600	520	180
Sixth	700	500	360	320	280	760	540	480	140

[a] Colleges supported in part by the State and in part by local funds.

NOTE.—Francs changed into dollars by dividing by five.

Salaries of professors and instructors in lycées for boys.[a]

Location and class.	Full professors (titulaires).	Professors of special branches having the degree of licentiate or equivalent diploma.	Professors in elementary classes.	Teachers in elementary classes.	Professors of drawing.	Assistant teachers of drawing.	Professors of gymnastics.	Préparateurs (tutors who assist pupils in the preparation of lessons).	Répétiteurs (tutors).	
									First class.	Second class.
Seine and Versailles:										
First	$1,500	$1,200	[illegible]	$840	$800	.....	$480	$800	$740	$600
Second	1,400	1,140	880	780	760	.....	440	760	680	520
Third	1,300	1,080	800	720	720	.....	400	720	620	500
Fourth	1,200	1,020	720	680	680	.....	360	680	580	460
Fifth	1,100	960	680	600	640	.....	340	640	540	[illegible]
Sixth	1,000	900	600	540	600	.....	320	600	500	380
The departments:										
First	1,040	960	740	620	520	$440	360	660	740	600
Second	960	880	720	580	[illegible]	400	320	620	680	520
Third	880	800	660	540	[illegible]	380	300	580	620	500
Fourth	800	720	600	500	440	360	280	540	580	460
Fifth	720	[illegible]	520	460	420	340	260	520	540	420
Sixth	640	560	500	420	400	320	240	500	500	380

[a] State classical colleges.

NOTE.—Francs have been changed to the equivalents in dollars by dividing by five.

Public secondary schools for girls.—The State lycées and the communal colleges for girls are maintained in the same way as the corresponding institutions for boys. They are not classical schools, but offer courses of instruction adapted to the demands of the society for which the young women of the higher classes of France are fitted. Special attention is given to instruction in modern languages and to art studies. The lycées for girls number 41, attended in 1902 by 10,621 students, of whom 2,299 were boarders.

The total expenditure for the lycées for girls amounted in 1902 to 3,254,669 francs ($650,933), of which the State furnished 2,048,018 francs ($409,603).

The communal or municipal colleges for girls enrolled 5,122 students, of whom 1,281 were boarders. There were also 5,445 pupils in the so-called secondary classes for girls, which are conducted by authorized professors or teachers and receive financial aid from public funds. The distribution of the pupils reported in secondary institutions for girls in 1903 was, in lycées, 11,874; in local colleges, 5,669; in secondary classes, 6,619.

The establishment of the lycées for girls dates from a law of 1880 (the Camille Sée law). The success of this measure in overcoming the prejudices of parents against

secular institutions for girls is indicated by the ever increasing enrollment in the public lycées and colleges, as shown in the following table:

TABLE XVI.—*Enrollment in lycées and colleges for young women from 1881 to 1904.*

Year.	Lycées.			Colleges.			Total.
	Academic department.	Primary department.	Total.	Academic department.	Primary department.	Total.	
1881			71			229	300
1882	315	206	521	429	567	996	1,517
1883	817	464	1,281	787	869	1,656	2,937
1884	1,080	618	1,698	1,060	988	2,048	3,746
1885	1,421	822	2,243	1,122	1,012	2,134	4,377
1886	1,713	1,048	2,761	1,218	958	2,206	4,967
1887	1,953	1,295	3,249	1,446	1,152	2,598	5,845
1888	2,191	1,481	3,672	1,596	1,306	2,962	6,634
1889	2,294	1,570	3,864	1,571	1,416	2,987	6,851
1890	2,328	1,120	3,955	1,604	1,484	3,088	7,043
1891	2,831	2,132	4,963	1,410	1,272	2,682	7,645
1892	3,214	2,411	5,625	1,460	1,416	2,876	8,501
1893	3,704	2,822	6,526	1,365	1,358	2,723	9,249
1894	3,924	2,809	6,823	1,602	1,515	3,117	9,940
1895	4,055	3,108	7,163	1,702	1,548	3,250	10,413
1896	4,266	3,297	7,563	1,653	1,429	3,082	10,645
1897	4,352	3,440	7,792	1,648	1,403	3,051	10,843
1898	4,378	3,623	8,001	1,882	1,519	3,401	11,402
1899	4,675	3,786	8,461	1,930	1,633	3,563	11,994
1901			9,606			4,356	14,162
1902	5,866	4,755	10,621	2,804	2,318	5,122	15,743
1903	6,446	5,428	11,874	3,104	2,565	5,669	17,543
1904	7,100	6,142	13,242	4,125	3,281	7,406	20,648

UNIVERSITIES AND SPECIAL SCHOOLS.

The development of the universities of France under the conditions of organized and independent life brought about by recent measures (decrees of 1885 and law of 1896) has been described in detail in successive reports of this series.[a] No general report of the universities has been published since 1902, but the report presented to the Chamber of Deputies by the chairman of the committee on appropriations asked for the current year shows that there has been no diminution of effort in this department.

In particular is noted in this report the increase of resources and equipments for scientific research and experimentation. In the session of 1903 the legislature created a fund for these purposes to be maintained by an annual appropriation of 150,000 francs ($30,000). The University of Paris has decided upon plans for a new laboratory of applied chemistry and a laboratory of physics. The University of Lyon, which is second only to that of Paris and holds the first place in respect to applied science, has recently extended its facilities for instruction and research in botany, zoology, and agricultural geology. The remaining universities report also continued activity in respect to the specialties for which they are severally noted.

The report of the financial committee calls attention, on the other hand, to the meager equipment of the faculties of medicine in respect to instruments and apparatus required by recent discoveries and consequent changes in the methods of diagnosing and treating disease. Complaint is made that as a consequence of this deficiency medical students acquire a theoretical acquaintance with methods with which they should become practically familiar, and, once graduated, pursue their profession after the outworn methods of fifty years ago.

Attention is also called to the importance of giving increased recognition to courses of instruction recently organized in the faculties of law to meet the demands of commercial and industrial interests and of the ever-increasing international and colonial relations.

[a] See in particular Reports of Commissioner of Education, 1891–92, vol. 1, pp. 76–96; 1894–95, vol. 1, pp. 292–294 and 305–312; 1895–96, vol. 1, pp. 620–639; 1896–97, vol. 1, pp. 33–38; 1900–1901, vol. 1, pp. 1119–1139; 1902, vol. 1, pp. 696–710.

The Paris faculty of law has submitted a proposal for a special course of two years, leading to a bachelor's degree of "economic sciences," and open to persons who have not previously obtained the regular bachelor's degree.

The higher normal school (école normale supérieure) is an institution of university rank intended to prepare young men for the highest careers in the teaching profession. After an independent existence for more than a century the school was merged in the Sorbonne (University of Paris) by a decree of November 10, 1903, to take effect May 10, 1904.

The following tables show the enrollment in the universities and professional schools of university rank for the years specified:

TABLE XVII.—*Distribution of students in State universities.*

Designation of university.	Faculties, 1887–88.		Universities, 1897–98.		1900.	1905.
	Number of students. [a]	Income. [a]	Number of students. [b]	Income. [b]	Number of students. [c]	Number of students. [d]
Paris	9,140	$685,284	12,131	$1,005,538	12,192	13,431
Aix Marseille	433	94,261	849	129,983	772	1,152
Besançon	130	43,797	197	54,026	237	321
Bordeaux	1,029	142,064	2,144	219,656	2,124	2,433
Caen	531	101,556	772	130,687	609	748
Chambéry	.....	2,600	.....	2,620	.....	.....
Clermont	96	45,492	257	53,027	279	272
Dijon	236	69,897	604	91,002	649	902
Grenoble	318	65,431	476	86,192	558	769
Lille	810	138,357	1,425	195,057	1,141	1,190
Lyon	962	175,640	2,335	250,940	2,465	2,551
Montpellier	890	156,110	1,496	188,960	1,531	1,779
Nancy	454	158,255	1,001	197,377	1,064	1,540
Poitiers	391	82,310	944	111,710	752	888
Rennes	659	114,345	1,503	161,992	1,135	1,257
Toulouse	1,303	120,618	1,885	181,450	2,002	2,358
Schools of medicine not included in the universities	.....	.....	.....	.....	1,005	996
Algiers	223	98,623	763	112,329	862	1,033
Total	17,605	2,294,640	28,782	3,172,546	29,377	33,620

[a] Statistique de l'enseignement, 1878–88, pp. 133–418.
[b] Statistique de l'enseignement, 1900, pp. 10–180.
[c] Rapport portant fixation du Budget Général, Ministère de l'Instruction Publique, 1901 (Perreau), pp. 15, 16.
[d] The same (by M. Massé) for 1906, pp. 477–482.

TABLE XVIII.—*Distribution of university students in the different faculties.*

Faculty.	Number of university students.		
	State universities (January 15, 1900).	Independent universities (January 15, 1900).	State universities (January 15, 1905).
Law	9,709	1,109	12,528
Medicine	8,781	151	8,504
Sciences	3,857	185	5,192
Letters	3,476	168	4,519
Pharmacy	3,395	16	3,814
Protestant theology	159	.....	101
Total	29,377	1,629	[a] 34,658

[a] The difference between the totals for 1905 in the above tables is probably due to the registration of some students in more than one faculty. The total includes 1,922 women, distributed as follows: Law, 57; medicine, 689; sciences, 259; letters, 838; pharmacy, 79. The total includes also 2,360 foreigners.

The following special schools of university rank are also under the minister of public instruction:

Collège de France (appropriation, 1905, $109,300); Museum of Natural History (appropriation, $201,800); Practical School of High Studies [École Pratique des Hautes Etudes (State appropriation, $60,600; city, $7,200)]; Superior Normal School

[(110 students; appropriation, $53,400), reunited to the University of Paris by a ministerial decree to take effect November 1, 1904]; School of Charts [(École Nationale des Chartes (69 students; appropriation, $14,990)]; School of Oriental Languages (415 students; appropriation, $33,600); French School of Archæology at Rome (appropriation, $18,100); French School at Athens (appropriation, $22,000); École Nationale des Beaux Arts (2,000 students; appropriation, $84,052). The remaining special schools, such as the Conservatoire des Arts et Métiers, École Nationale Supérieure des Mines, etc., are under the charge of other ministers. (See Table XIII.)

State appropriation, 1903, for schools of art pertaining to the ministry of public instruction, section of fine arts.

National and special school of fine arts, Paris	$84,502
National school of decorative arts, Paris	30,424
Special school of architecture and normal school of drawing	7,000
National schools of fine arts, of decorative and industrial art	63,700
Department of municipal schools of drawing, of decorative and industrial art	66,090
National conservatory of music and declamation	51,980
Department schools auxiliary to the conservatory and national schools of music	37,899

PUBLIC SCHOOLS AND HIGHER INSTITUTIONS OUTSIDE THE ORGANIZED SYSTEM OF PUBLIC INSTRUCTION.

The province of the minister of public instruction does not include all the schools and higher institutions under Government control and supported partially, at least, by public funds. The minister of the interior has control of the schools for deaf mutes and the blind; the minister of war has charge of a select system of schools, primary and secondary, for the instruction of soldiers and under officers, and of the higher technical schools pertaining to the arts of war. To the province of the minister of the navy pertains a similar series intended for the benefit of the naval service. The minister for colonial affairs controls a school of high grade intended to prepare young men for service in the colonies, and several special schools of mines, bridges, telegraphy, etc. Finally, to the minister of agriculture, and the minister of commerce and industry pertain, respectively, the schools of agriculture and the commercial and industrial schools.

The higher technical institutions not included in the general system of public instruction are as follows:

TABLE XIX.—*Higher technical schools under other ministries than that of public instruction (ministry of agriculture, of commerce, of war, etc.).*

Institution.	Number of students.	State appropriation, 1903.
École Centrale des Arts et Manufactures	700	$142,251
Conservatoire National des Arts et Métiers, Paris	100	213,717
École des Hautes Études Commerciales	320	.....
Institut National Agronomique, Paris	240	66,360
École Vétérinaire, Alfort	294	88,000
École Nationale d'Agriculture, Grignon	120	.....
École Nationale d'Agriculture, Montpellier	200	.....
École National d'Agriculture, Rennes	118	.....
École Polytechnique, Paris	472	260,000
École Supérieure de Guerre	250	.....
École Spéciale Militaire, St. Cyr (ministry of war)	520	.....
École Navale, Brest	100	.....
École Nationale Supérieure des Mines, Paris	161	33,400
École Nationale des Ponts et Chaussées, Paris	118	71,120
École Coloniale	46	.....
École Nationale des Eaux et Forêts, Nancy	42	.....

The appropriation made by the legislature in 1905 for the service of agriculture included nearly $1,000,000 ($992,500)[a] for educational uses, and the appropriation for commerce and industry included for the same purpose $1,168,018.[b] The rapid increase in the provision for these special forms of education, in which stress is placed upon the sciences and their industrial application, has resulted in the duplication of courses of study already provided for in the schools for general education, with a consequent waste of resources and friction between the different ministries. The condition is illustrated by the schools of commerce and industry which have been differentiated from the higher primary schools and passed over to the control of the minister of commerce and industry. These schools, which numbered 50 in 1904, with an enrollment of 7,498 boys and 2,403 girls, still retain the main features of the programmes of the higher primary schools, but give more time to industrial or business training, as will be seen by examining the time tables here inserted.

Time tables of higher primary and industrial schools.

[Number of hours a week.]

Subject.	Écoles primaires supérieures. (Section industrielle.)			Écoles pratiques d'industrie.		
	First year.	Second year.	Third year.	First year.	Second year.	Third year.
Workshops or manual work	.....	6	6	30	30	33
Arithmetic, algebra, geometry, mechanics, etc	.....	3	3	3	3	4½
Writing and drawing of various kinds	.....	5½	5½	6	6	6
Natural science and history	.....	3	3	1½	4½	3
Literary:						
Reading, grammar, composition, geography, history, languages	.....	5	5	6	6	1½
Other subjects:						
Bookkeeping, technology, singing, gymnastics	.....	7½	7½	.....	.....	3
Total	.....	30	30	46½	49½	51

Efforts have been made from time to time to coordinate the work of the distinct systems, i. e., the system of general and the systems of industrial education, and a proposition has at last been submitted to the Chamber of Deputies for the creation of a minister and council of national education, with a view to concentrating all the educational functions of the Government under one direction.[c]

NATIONAL TECHNICAL SCHOOLS (ÉCOLES NATIONALES PROFESSIONNELLES).

Special interest attaches to the écoles nationales professionnelles, four in number, which were formerly under the joint control of the minister of public instruction and the minister of commerce, but which were assigned solely to the latter by the financial law of April 13, 1900.

These schools are the outcome of a special effort on the part of the State to organize in central places a complete course of education suited to the industrial classes. The exhibits of the schools named at Paris in 1900 and again at St. Louis in 1904[d] excited general interest, and have occasioned so much inquiry that the moment is opportune for repeating here certain particulars concerning the institutions, which have been extensively described in former reports.

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[a] Rapport portant fixation du budget, 1906, ministère de l'agriculture, par M. Hubert, pp. 53–57.

[b] Idem, ministère de commerce, de l'industrie, etc., par M. Berry, pp. 169–171.

[c] Report of M. Massé to the Chamber of Deputies, on the budget of 1906, p. 77.

[d] The exhibits of manual training from the écoles nationales professionnelles and from the écoles nationales d'arts et métiers (the latter representing a higher grade of technical schools), which were in the French section of the Educational building at the St. Louis Exposition, have come into the possession of the Bureau of Education and are now installed in Washington.

The scope and purpose of the schools here considered are thus defined by M. F. Buisson, who held the important post of director of primary instruction in the ministry of public instruction from 1879 to 1899, during which period these schools were organized in their present form.

Vierzon, Voiron, and Armentières are not, in any sense, special technical schools, more or less complete schools of engineering (écoles d'arts et métiers); they are associations of schools comprising an infant and a primary school (including both the elementary and higher grade school), and at each stage technical instruction which, commencing from the earliest age, when it is of little importance, continues up to the very end of the course, when it becomes of the first moment. . When he has arrived at this final stage, the apprentice, who now only needs the practice of his trade to become a workman, leaves the national school and goes either into a workshop or into a technical school, in the proper sense of the term. Hence these three (now increased to four) establishments provide a general preparation for artisan and industrial life. They lead a youth right up to the threshold of the factory or the engineering school, armed with every kind of general and special knowledge, with the aptitudes and habits of work which will enable him either to select a particular calling, or, if needs be, pass from one calling to the other, sure of being, after a few months of practice, a finished workman.

From the above statement it will be seen that these institutions are groups of schools, each section—i. e., infant schools, elementary primary, and higher primary, being housed in a separate building, all however situated in the same campus and under a single director. As the schools provide for both day and boarding pupils, the group of buildings includes, besides the school buildings proper and the shops, the dormitories for pupils, an infirmary, the director's house, etc.

The administrative and educational affairs of these institutions are kept distinct from each other. The administrative staff of each group of schools consists of a director, treasurer, general supervisor, and an assistant supervisor who has special oversight of the pupils in the workshops.

The teaching staff consists of (1) professors and assistant instructors in the literary and scientific branches; (2) directors of the workshops, assisted by practical foremen for the technical instruction of pupils in the work pertaining to those industries in which they intend eventually to serve their apprenticeship; (3) additional teachers for accessory branches.

The programmes for the infant school (ages 2 to 6 complete) and for the elementary primary school are substantially the same as for the corresponding schools pertaining to the general system of education, with more stress upon manual training and systematic progression in the manual work from the early stage of the elementary primary school to the completion of the higher primary school.

The institutions accommodate each about 450 pupils (boys only), viz, 100 in the infant school, 100 in the elementary primary school, and 250 in the higher grade school. Of the latter about 200 are boarders. In the higher school the annual fee is 500 francs ($100), which covers the cost of board, tuition being entirely free. There is an additional charge of 25 francs ($5) for books, material used in the shops, etc. Parents are also expected to provide their children on entering the school with a general outfit at an expense of about 200 francs ($40) for the first year and 50 francs ($10) each subsequent year.

As the programme of the higher grade school is what gives distinctive character to the education imparted in these institutions, the view of the schools may be completed by an examination of this programme and the requirements for admission to this division. In order to enter the higher school a boy must have completed the course of study in the elementary primary school and must have passed the examination for the certificate of primary studies. A large proportion of the pupils entering this division have the benefit of Government scholarships, which are secured by competitive examination open to candidates from 12 to 15 years of age. This examination comprises (1)

composition on a subject relating to history, geography, or moral and civic education; (2) treatment of a subject connected with elementary, natural, and physical science; (3) a sum in arithmetic. Two hours are allowed for each of these subjects. The candidates who qualify in them have, after an interval, to pass an oral and practical examination which extends over three days. The oral part consists in (1) reading a page of a French author, with questions on spelling and grammar; (2) elementary questions on history, geography, and the duties of a citizen; (3) elementary questions on natural and physical science, up to the standard of the higher course of an elementary school. The practical examination consists in geometrical drawing, a test in manual work, and a gymnastic exercise.

The scope of the examination may be taken to indicate the stage of advancement for pupils entering upon the work of the higher school.

The course of study for this division is arranged for three years; the programme for the first year is the same for all schools of this class, but in the second year specialization begins, the work thenceforth bearing immediate relation to the special trades of the respective districts in which the schools are situated. At Vierzon, it is related to ironwork and painting on pottery; at Voiron, to working in paper, linen, and silk.

The following is the weekly time table for the school at Voiron, not including the time required for preparation out of class hours:

	First year.	Second year.	Third year.	
			a.	*b.*
Workshops or manual work	14	17½	24½	17
Arithmetic, algebra, geometry, mechanics, etc	5	6	4	10
Writing and drawing of various kinds	6	6	6	10½
Natural science and history	4	4	4	.....
Literary:				
Reading, grammar, composition, geography, history, languages.	9	8	6½	7
Other subjects:				
Bookkeeping, technology, singing, gymnastics	2	2½	2	2½
Hours per week	40	44	47	44

The programme for Vierzon is practically the same as regards the distribution of time, but Voiron has a special section for teaching agriculture, with a building and garden of its own. This section was undertaken as an experiment about eight years ago, but so far it has been found difficult to manage it as part of a school which is mainly directed toward the mechanic arts.

The accommodation of the workshops is very complete. The carpenters' shop at Voiron measures 24 meters square and contains 50 benches. The boys of the third year work at carpentering about twenty-five hours a week, at the rate of about four hours a day. The forge room is about 12 meters square and has 9 forges. The fitting room is 25 meters square and contains 104 vises. The greater part of the machines have been constructed by the boys. At the opening of the school there were only 2 machines and 30 vises in the room. The weaving room measures 24 meters square and contains 5 power and 12 hand looms. A small room, hitherto used for drawing, is shortly to be fitted up for electrical apparatus. There is a special course of electricity, and some electrical apparatus is also constructed. Steam power is provided in all the workshops, and the building is lit throughout by electricity.

A court, in which the boys do gymnastics, measures 20 by 11 meters. It is used by sections of 40 boys at a time. During the first year there is marching exercise on two days, and during the second and third year on one day in the week.

Vierzon possesses three workshops, viz, a carpenter shop with 48 benches, a forge shop with 12 forges, and a fitting shop with 90 vises, 9 turning lathes, etc.

The report of the four écoles nationales professionnelles for 1902 gives the following particulars:

Location.	Professors.	Students.	Diplomas awarded.		Expenditures.		State appropriations.	
			Higher.	Lower.	French currency.	U. S. currency	French currency	U. S. currency.
					Francs.		*Francs.*	
Armentières	25	301	8	.....	228,437	$45,687	78,300	$15,678
Nantes	37	282	.....	5	133,896	26,779	119,853	23,970
Vierzon	22	318	17	.....	232,675	46,535	107,077	21,415
Voiron	36	264	8	24	211,608	42,321	94,250	18,850
Total	120	1,165	33	29	806,616	161,322	399,570	79,913

CHAPTER V.

THE TEACHING OF AGRICULTURE IN THE SCHOOLS OF FRANCE AND BELGIUM.

Primary agricultural instruction for the children of farmers in France, although proposed and discussed from time to time since the latter part of the eighteenth century, was not actually put upon the programmes of the schools until 1850, and even then only as an elective. In consequence of several bad harvests a thorough inquiry to determine the best way of ameliorating the condition of agriculture was begun in 1866 and lasted until 1870. This inquiry included the question of agricultural instruction in primary schools, and involved a reorganization of that grade of instruction, in order to include agriculture in its programme. After the Franco-Prussian war of 1870 the country realized that one of the principal means of repairing its disasters was to be found in the education of the masses, especially from a practical and industrial point of view, and as part of the new development of instruction schools of horticulture and agriculture were established in 1873, and in 1876 the Institut National Agronomique was reopened at Paris. These institutions represented secondary and superior instruction in agriculture, while besides them, in 1879, the elementary principles of agriculture were included among the obligatory studies of primary instruction. This arrangement was confirmed by the law of March 28, 1882, which organized agricultural instruction both in the primary, the normal, and the superior schools of the country, the fruit of this wise measure of a quarter of a century ago being shown, says M. Tisserand, in the improved methods of agriculture and the entrance of the scientific spirit even into the management of small farms.

THE SPIRIT OF THIS INSTRUCTION.

Instruction in agriculture in elementary schools, said M. Prilleux at the International Congress of Agriculture in 1889, should not resemble that in history or the catechism; it should be addressed to the intelligence and not to the memory of the children, who should be trained to observe carefully and systematically things around them—rocks, plants, animals, machines, and implements. The teachers were not at that time prepared to give this instruction, but still gave text-books to their pupils to memorize instead of pointing out the things themselves which are described in the books and making the incipient study objective. Continuing in this direction, inasmuch as modern agriculture is based upon science, elementary instruction in agriculture should include elementary experimental science, physical and chemical, with especial reference to agriculture, and accordingly those branches were included in the school programmes, sufficient chemistry, for example, being given to enable the pupil to understand the composition of soils and fertilizers and what elements are required for plant life. The course in normal schools was also modified to prepare teachers to supply the needs of the elementary schools properly in agricultural instruction. The pupil teachers were taught experimental sciences, natural history, horticulture, and

agriculture, and were also trained in the best methods of teaching those branches, while the schools were equipped with suitable laboratories and collections to carry out this instruction. The work in agriculture of the elementary schools is extended to schools for adults in the form of evening classes and secondary assemblies for lectures and object lessons.

The means of carrying out practical and experimental instruction in agriculture, aside from the usual laboratory scientific apparatus, consisted of actual garden and farm work and experiments indoors in growing plants under varying conditions of exposure to heat, light, and moisture, and with a view to discovering the effect of different gases, fertilizing substances, different soils, etc., upon them. M. Le Blanc gives many illustrations of the chemical and botanical experiments, the latter showing the effects of the various fertilizers by the greater or less development of the plants. To illustrate the foregoing general remarks we give the following programmes:

I.—ELEMENTARY PRIMARY SCHOOLS.

PHYSICAL AND NATURAL SCIENCES.

Elementary course (7 to 9 years of age)—Comprising object lessons graded according to a plan chosen by the teacher, but which once adopted must be regularly followed. Man, animals, vegetables, minerals; observation of ordinary objects, and phenomena, with simple explanations; elementary notions upon the transformation of things of daily use (food, tissues, paper, wood, stones, metals); small collections made by the pupils, especially during school promenades.

Middle course (9 to 11 years of age)—Including elementary notions of natural science. Man: Brief description of the human body and ideas of the principal functions of life. Animals: Grand divisions and classification of the vertebrates by the aid of one animal for each group taken as a type. Vegetables: Study of the principal organs of plants, taking a few chosen types; grand divisions of the vegetable kingdom; useful and injurious plants pointed out, especially during school promenades.

The three states of matter, solid, liquid, and gaseous; air and water; combustion; experimental demonstrations on a small scale.

Superior course (11 to 13 years of age)—Being a review and extension of the middle course. Man: Digestion, the circulation, respiration, the nervous system, the organs of sense; practical course in hygiene; abuse of alcohol, tobacco, etc. Animals: Outlines of classification; useful and injurious animals. Vegetables: Essential parts of plants; principal groups; herborisations. Minerals: Summarized ideas upon soil, rocks, fossils, geological formations, examples taken from the neighborhood; excursions and collections. Elementary notions of physics: Weight, the lever, equilibrium of liquids, atmospheric pressure, the barometer; very elementary notions and simple experiments upon heat, light, electricity, magnetism (the thermometer, steam engine, lightning conductor, telegraph, compass). Elementary notions of chemistry: Simple and compound bodies; common metals and salts.

AGRICULTURE AND HORTICULTURE.

Elementary course.—First lessons in the school garden.

Middle course.—Lectures, object lessons, and excursions, to show the principal kinds of soils and fertilizers, the common kinds of labor and tools (spade, mattock, plow, etc.).

Superior course.—More methodical ideas of agricultural labor, farming tools, drainage, natural and artificial fertilizers; seed time and harvest; domestic animals; agricultural bookkeeping. Horticulture: Principal means of multiplying the most useful vegetables of the region. Arboriculture: Grafting.

II.—SUPERIOR PRIMARY SCHOOLS.

The programmes for such of these schools as have a three-years' course (for pupils over 13 years of age) by decree of 1893 are as follows:

Distribution of subjects of instruction (boys).[a]

[The figures indicate hours a week.]

Subjects.	General section.			Industrial section.		Commercial section.		Agricultural section.	
	First year.	Second year.	Third year.	Second year.	Third year.	Second year.	Third year.	Second year.	Third year.
Morals	1	1	1	1	1	1	1	1	1
French	5	5	4	2	2	2	2	2	2
Writing	1	1	1	1	1	1	1	1	1
History and civics	1	1	2	1	1	1	1	1	1
Geography	1	1	1	1	1	2	2	1	1
Modern languages	3	3	2	.....	.....	4	4	.....	.....
Mathematics	4	3	3	3	3	2	2	2	2
Bookkeeping and accounts	.....	1	1	2	2	3	3	1	1
Physics and chemistry	2	2	2	2	2	2	2	2	2
Natural history and hygiene	1	1	1	1	1	1	1	2	2
Agricultural and horticultural	1	1	1	.....	.....	.....	.....	3	3
Law and political economy	.....	.....	1	.....	1	.....	1	.....	1
Drawing and modeling	3	3	3	4½	4½	1½	1½	1½	1½
Manual and agricultural labor	4	4	4	6	6	2	2	6	6
Gymnastics	2	2	2	2	2	2	2	2	2
Singing	1	1	1	1	1	1	1	1	1
Hours assignable at need	.....	.....	.....	2½	1½	4½	3½	6½	2½
Total	30	30	30	30	30	30	30	30	30

[a] An analogous table is given for girls in the official programmes.

THEORETICAL AGRICULTURE AND HORTICULTURE.

[One hour a week the three years.]

FIRST YEAR.

The soil; subsoil; modifications by cultivation. Farming tools. Different farming operations. Study of plants from the agricultural standpoint. Natural agents of vegetation. Domestic animals. Useful and injurious insects. The garden; tools; principal operations of horticulture.

SECOND AND THIRD YEARS.

The soil and water; drainage and irrigation. Operations and implements for farming on a large scale. Cultivation suitable to the region. Natural and artificial meadows. Viticulture. Cattle. The farmyard. Bee and silk culture. Gardening. The kitchen garden, fruit garden, garden work and produce. Sylviculture. Agricultural economy. Agricultural accounts.

PRACTICAL AGRICULTURE AND HORTICULTURE.

General section.

[Four hours a week.]

FIRST YEAR.

Pupils will act as assistants to those of the second and third years.

SECOND AND THIRD YEARS.

Spring and summer work.—Gardening; demonstrative cultures; grafting; comparative experiments in culture—treating different varieties of plants with the same fertilizer and the same plants with different fertilizers. Laying out squares and beds for demonstrations. Special cultivation of plants of the region.

Winter work.—Preparation of products used in agriculture; lime in different forms, salts of copper, etc.; liming, sulphating; experimental study of the elements of an earth, of a vegetable mold, of ashes, and of the principal fertilizers (experiments only qualitative). Determination of the proportion of lime in a soil, of alcohol in a wine, etc.

Section of agriculture.

[Six hours a week.]

INDOOR WORK.

Study of seeds.—Seeds of cultivated plants and of noxious plants. Dodder; how to prevent its growth. How to determine the purity of seeds. Germination. Germinative power of different seeds.

Soils.—Composition, mineral constituents; physical analysis of soils. Rocks of the region; soils produced from them; transported soils. How to take samples of soils for analysis. Difference between soil and subsoil.

Fertilizers.—External characters of the fertilizers of commerce, their preparation and method of application. How to take samples for analysis.

Agricultural implements.—How to take them to pieces and set them up; greasing and oiling; replacing parts. The work done by various tools. Keeping in repair.

Plants.—Herbariums.

Milk.—Determination of the quantity of cream. Butter making. Manufacture of cheese and rennet. Precautions to insure the greatest cleanliness.

Cattle.—Dentition and age. Practice on anatomical specimens, and occasionally on living animals. The hoof of the horse, the ox, the ass, and how to shoe those animals.

Beehives.—Different types; manufacture of hives of different sorts, and particularly those with removable frames.

Gardening material.—Making straw matting; trellises; props; spades; rakes; handles for tools, etc.

Remedies for plants.—Manufacture of quicklime; solutions of sulphate of iron bouillie bordelaise (solution of copper sulphate and quicklime) and similar mixtures, sucrate of copper, etc. Use of the pulverizer. Sulphating seeds.

Buildings and material.—Making poultry houses, rabbit hutches, etc., and their care (cleaning, painting). Disinfection of stables, cattle sheds, sheep folds, etc. Bee culture; breeding rabbits, pigeons, poultry, and fattening them. Collecting insects.

OUTDOOR WORK.

Spading, raking, rolling, clipping, etc. Grafting in the nursery and on the experiment table; trimming fruit trees; seed beds; transplanting; setting out slips, etc.; weeding, divers cultivating operations.

Fertilizers.—Preparation of and spreading complementary fertilizers (mineral and others); making compost heaps.

Applying flour of sulphur by blower to destroy oïdium of the vine, the rust of vegetables, peas, melons, etc. Applying copper compounds by the pulverizer to protect potatoes, tomatoes, etc., and vines and pear trees.

Harvesting, storing, and preserving crops.—Silos, haycocks, etc.

Special beds for making a comparative study of the action of different fertilizers and of different varieties of cultivated plants. Visits to nurseries, gardens, markets, and fairs of the neighborhood.

Every visit or excursion will be made the subject of a report which the teacher will correct carefully.

III.—NORMAL SCHOOLS FOR MEN.

The distribution of studies in normal schools for men is shown in the following table. The figures indicate the number of hours a week devoted to each subject.

Subject.	First year.	Second year.	Third year.
Literary course.			
Psychology, morals, and pedagogics	2	2	2
French language and literature	5	4	4
History and civics	3	3	3
Geography	1	1	1
Writing	2	1	.....
Modern languages	2	2	2
Total	15	13	12

Subject.	First year.	Second year.	Third year.
Science course.			
Mathematics	3	4	4
Physics and chemistry	2	2	3
Natural science and hygiene	1	1	1
Drawing and modeling	4	4	4
Theoretical agriculture	.....	1	1
Total	10	12	13
Manual and agricultural labor	5	5	5
Gymnastics and military drill	3	3	3
Singing and music	2	2	2

The instruction in agriculture in the normal schools is advanced and the programmes indicate much technical detail. A few examples must suffice. The following subjects are among those prescribed for the first year:

Agrology, study of the soil.—(1) Soil and subsoil. Nature and composition, definitions, origin and formation of the arable layer. Effects of meteorological, mechanical, and chemical action upon the soil. (2) Classification of soils according to their physical and chemical properties; analysis of soils; productive power or fertility of soils; circumstances which influence the quality of soils, such as geographical situation, altitude, inclination and exposure of the ground, and the distribution of rain; physical properties and chemical composition of soils suitable for wheat, rye, barley, etc. (3) Means of modifying the composition of the soil and its physical properties. Fertilizers of animal, vegetable, and mineral origin; details of composition; the preparation and treatment of each, with calculations of the quantities needed for various purposes, etc., are given as parts of the programme, together with methods of chemical analysis.

Similar minute practical details are laid down for the study of irrigation and drainage, and for phytotechnics or the cultivation of plants.

In the second year similar minuteness of study is likewise devoted to zootechnics, or the breeding and care of animals, and to horticulture in all its branches.

The instructions relating to the teaching of agriculture in the normal schools still further elucidate its thoroughness. A few examples will illustrate this fact. Thus under botany the instructions read:

By means of microscopic preparations made in presence of the students the teacher will initiate them into the manipulation of the microscope and show them how to distinguish by that means the different parts of a plant, its tissues and the contents of its cells, etc. The description of the organs of a plant shall always be connected with facts which have an agricultural interest or application. Thus, apropos of roots, it will be well, after studying normal roots, to point out the existence of the nodosities of the roots of leguminous plants and the fundamental fact which follows from the study of them, viz, the nitrogenous nutrition of the plants of that family. The knowledge of the different types of the ramification of roots will permit the establishment of the principle of the alternation of crops, and the determination of the comparative value of different modes of sowing.

Under geology the directions are to study the actual phenomena of the region. After the teacher has familiarized the students with some of the common minerals and rocks—feldspathic, silicious, argillaceous—limestones and gypsum, he will explain the action of water on them, with demonstrations from the rocks of the neighborhood, and generalize from those observations. Then, in studying the action of infiltration from surface rain water, the phenomena of solution and precipitation will be insisted upon, which will aid in explaining the deposition and consolidation of various formations, e. g., of sand into sandstones, or conglomerates, deposits of limestone, gypsum, salt, etc.

The interest of the teachers of agriculture in their work is stimulated by the establishment of a system of prizes (medals) granted by the Government as rewards for excellence in inculcating agricultural knowledge, both theoretical and practical. The

minister of agriculture also intervenes in primary agricultural instruction by issuing circulars of instruction to the teachers from time to time, directing them how to secure the best and most practical means of carrying out their work. Thus there is cooperation in this branch of study between the scientific workers who make original investigations and the ministers of public instruction and of agriculture, the result of which is a thorough organization of the teaching force and courses of study, with expert selection of suitable scientific matter.

AGRICULTURAL SCHOOLS OF HIGHER AND SECONDARY GRADE IN FRANCE.

The existing provision for agricultural instruction in France comprises the following: (1) Higher institutions: National Agronomic Institute at Paris; 3 veterinary schools with 27 chairs; a national school of forestry at Nancy. (2) Institutions of secondary grade: Three schools of agriculture—at Grignon, Rennes, and Montpellier, with 26 professors, 29 auxiliary professors and assistants; 1 agricultural and industrial school at Douai; 1 national school of horticulture at Versailles. (3) Practical schools of agriculture, 47 in number, including 4 dairy schools and 2 schools of bird culture. (4) Divers establishments to the number of 57, including schools of silkworm culture and fruit culture and dairy schools. (5) Two hundred and twenty-two professors of agriculture, of whom 86 are departmental professors, who give lectures, hold conferences on their specialty, etc., and the remainder are employed to give courses of lectures in particular localities or at secondary schools. (6) Stations for demonstration organized in all the departments. (7) Establishments for research; experimental stations and laboratories numbering in all 64. (8) Three schools of household industry and dairy work for girls.

THE NATIONAL INSTITUTE OF AGRONOMY.

To the French ministry of agriculture the Bureau is indebted for the Annals of the National Institute of Agronomy (or University School of Agriculture), second series, volume 1, containing a historical sketch of the institute and its course of instruction from its foundation to 1901. It appears that this institution was founded at Versailles by the law of October 3, 1848, but was suppressed in 1852, to be reestablished at Paris by the law of August 9, 1876. To Lavoisier, the famous French chemist, is attributed the first idea of scientific instruction in agriculture in France, a plan of such instruction having been presented to the convention in 1789; but the disturbances of the revolution and later wars prevented the realization of this plan until the early part of the nineteenth century, when agricultural chemistry, having made great advances under the discoveries of Priestley and Saussure, was subsequently placed upon a firm basis by the later and more systematized work of Liebig and Boussingault. The experience gained in several previously established agricultural schools was utilized in the organization of the course of instruction at the Institute at Versailles in 1848, and this was modified to keep pace with the discoveries in science when the school was reestablished at Paris nearly thirty years later, in 1876.

The original institute comprised three degrees of instruction, the highest consisting of the Agronomical Institute proper, an institution of higher or university grade, devoted to scientific research, and two lower grades, consisting of regional agricultural colleges or schools, and farm schools, the latter giving practical instruction to the sons of small farmers. The institute proper combined theoretical with practical studies, and was intended to train and educate young men to be disseminators of the information they received there in later years, besides teaching the élite of the youths who would become farmers and small-landed proprietors. The institute was reestablished in 1876 but transferred to Paris, in order to afford it the advantage of being at the scientific center of France. It was installed in the Conservatoire des Arts et Métiers.

Its list of professors has contained some of the most distinguished names in French science—Boussingault, Becquerel, Delesse, du Breuil, Carnot, Duclaux, and Schloesing. Würtz, equally celebrated, had been professor of chemistry while the institute was at Versailles.

The aim of the instruction at the institute since its reestablishment has been practically the same as before, but its scope has been enlarged and it now prepares students for the following careers: Farmers and landowners with a scientific knowledge of agriculture; professors to teach agriculture in the national schools, schools of practical agriculture, normal schools, etc.; educated managers for either the public or private service in situations where a knowledge of agriculture is desired; forestry experts; directors of agricultural stations; chemists and directors of agricultural industries, and agricultural engineers (drainage, irrigation, machine construction).

The admission examination is both written and oral, the former covering the following subjects: Arithmetic, algebra, geometry, mechanics, use of logarithms, and trigonometry; French, natural sciences (zoology, botany, geology, physical geography), physics and chemistry, descriptive geometry, lettered drawings. The oral examination, added to the foregoing subjects, cosmography, geography, and modern languages (German and English). Agriculture forms an elective subject.

The written examinations take place in cities in different parts of the country, but the oral appears to be confined to Paris. A glance at the detailed subjects of examination shows that candidates are expected to have studied the fundamental sciences, which include a comprehensive list of subjects, thoroughly. These subjects cover a wider field than those included in the course of study of the lycées, which leads to the baccalaureate degree. An idea of their scope may be obtained from the following specimens. Under the general head of "electricity and magnetism" occur the following special subjects among others: Telegraphs; electric induction; fundamental experiments thereon; principle of magneto-electric and dynamo-electric machines; reversibility of these machines; the telephone; heating and lighting by the current; the voltaic arc; the incandescent light. Under the general head of "chemistry" occurs as one of the special subjects, nitric acid; its synthesis by the electric spark; nitrification; commercial preparation. These questions indicate the practical tendency of the preparatory scientific studies. Under "physical geography" the candidate is required to answer questions upon the seas and lands of the globe; the coasts, islands, and straits of Europe; the mountain ranges; the hydrography of France; detailed description of the regions traversed by the Rhine, the Meuse, the Scheldt, the Seine, the Loire, the Garonne, the Rhone, etc., and their principal affluents; description of the coast basins; railroads, the principal lines and their connections; French colonies in Asia, Africa, America, and Oceania; the boundaries, population, races, religions, governments, political divisions, commercial and industrial wealth of the different States of Europe.

The course of study at the institute is exhaustive of the various branches of science which can bear upon agriculture. The professors are recognized as authorities in their special branches, and the lists of their publications fill many pages. It is impracticable to do more than select a few of the subjects of study which form the bulk of the report in order to illustrate their scope or the method of instruction. The first general subject given is the biology of the plants cultivated in France and her colonies, and this begins with biology in general, followed by general botany and the special botany of all the plants under discussion. Animal biology and physiology follow next. To illustrate the scope of this study, we take from Chapters I and IX of the programme the following extracts:

Biology is the study of life as physics is the study of natural forces. Relations between these forces and life. Claude Bernard and determinism. What is meant by vital forces. Influence of external agents upon living beings. Latent life. Oscillating life. Homeotherms and poïkilotherms. Constant life and its conditions. * * *

Transformation of heat into energy; animal work; equivalence of work and food; work done by the destruction of sugar, fat, and albumen; the idea of an animated motor; every vital activity has for its final object the destruction of bioplasm and the correlative production of motion and work. Experiments of Wislicenius.

Under the general head of geology applied to agriculture the general principles of geology are studied, as well as its special applications. Thus, under the action of the atmosphere are included the disintegration of rocks, transportation of dust, fertilizing dust; dunes, causes of their extension, removal of woods, fixation and utilization; the dunes from an agricultural point of view. Under the action of water are included streams, formation of alluvium; fluviatile alluvium from an agricultural point of view. The classification under "petrography" divides rocks into three classes—eruptive, cristallophyllian (metamorphic), and sedimentary. Plant pathology is, as might be expected, very fully treated, and includes teratology and diseases both non-parasitical and parasitical, together with studies of the parasites themselves. The department of physical and chemical sciences is devoted largely to meteorology, 25 out of the 30 lectures of the course being upon meteorological subjects. Nevertheless, the names of those who have been professors of physics and chemistry in this department are well known all through the scientific world. Among them are those of Becquerel and Henri Moissan. The course of study in the department of electricity concludes with a section upon the influence of electricity upon vegetation, which contains but one heading, viz, history of the attempts which have thus far been made to demonstrate the existence of such influence. In the course in chemistry it is observable that among the exercises set for beginners in the preparation of the usual gases there occurs such advanced manipulation as the preparation of marsh gas by Dumas' method, i. e., by heating a mixture of sodium acetate and soda lime, and then analyzing the gas produced by passing it over red hot oxide of copper and collecting the water and carbonic acid so formed. Naturally, much attention is given to the analysis of fertilizers, soils, sugars, milk, wines, and all agricultural products.

The course in agricultural mechanics and hydraulics gives special attention to machines and motors capable of being used in agriculture, and to drainage, irrigation, etc. Social science is represented by a course upon rural legislation and administrative law (the rights of landowners, highways, waterways, water rights, etc.), rural economy, and political economy.

The foregoing courses comprise the fundamental sciences of agronomy; the remainder are more practical, and include all branches of agriculture in which the preceding sciences receive application. In this division are found agricultural excursions, work of experimental stations, practical farming, care of animals, etc.

ENGLISH AND FRENCH RURAL SCHOOLS COMPARED.

The modern development of instruction in agriculture in France has attracted the attention of the English board of education, and a special report upon rural education in France, with particular reference to the nature and effects of such instruction, was published by that board in 1902. Naturally, a contrast or comparison is drawn in the report between the French and English ideas upon the subject of instruction in rural schools, due to the difference in the conditions of life in the two countries. Three main points of difference are pointed out by Mr. Cloudesley Brereton, M. A. (the author of the report upon rural schools of northwest France). These are, first, that France has a more or less rural population, while in England the population is rather urban in its occupations and tastes; secondly, England is rather the country of large farms, while France is a land of small holdings, and, finally, in the English village community the great bulk of the inhabitants are landless men. In France, on the other hand, in some communes, one person in every four is a small proprietor, and therefore the pick of the village school are the sons of peasants and are all more or less familiar with farm

work. The sons of the landless English will, most of them, become laborers. Accordingly the problem in rural schools in England is to give a hand and eye training and so raise the efficiency of the laborers. The French boys will each have a strip of land of his own, and they do not come to school to learn practical farm work, which they already know, but the programmes for rural schools as eventually worked out (in 1897) laid down that the method to be followed should be that of imparting notions of science applied to agriculture and rendered practical. Object lessons, walks, and experiments were made to take the place of the old memoriter text-book methods, and finally quite advanced chemistry, biology (practical), hygiene, together with laboratories and plats for experiments with plants were added—as is more fully shown in the programmes given elsewhere. Mr. Brereton points out that the problem of finding the best instruction for rural schools in England is more intricate than in France, owing to the greater complexity in the composition of the English rural population and to the difference in social traditions, as already indicated. Hence it may be inferred that a speedy reorganization of instruction in rural schools in England, like that which has been effected in France, may not be feasible. The national conservatism in this case, as in so many others, must first be satisfied that any extensive change in the schools, to say nothing of a radical one, is really desirable, before it will deliberate upon the means for effecting it.

AGRICULTURAL EDUCATION IN BELGIUM.

The scheme of agricultural education in Belgium is arranged in three grades—elementary, secondary, and higher. The elementary instruction includes notions of agriculture imparted in the primary schools according to a detailed programme arranged with special reference to the chief local product.

Instruction in agriculture in the secondary schools is of recent date in Belgium, the course having been initiated as an optional study in a few secondary schools in 1880–81. Since 1886 the Government has introduced it into State secondary schools generally, including the highest classical schools or royal atheneums. The lessons are open to the farmers of the neighborhood, who have taken advantage of the privilege to attend evening classes. The course in agronomy, which is now organized in 29 secondary schools and 6 royal athenaeums, includes the following subjects: Soil and subsoil, mechanical cultivation of the soil, plowing, seed, germination, sowings, harvest and haymaking seasons, fertilization of the soil, agricultural hydraulics, management, hygiene, animal nutrition and alimentation, drinks, maintenance.

These matters are to be treated in detail according to an official syllabus, which for the corresponding subjects closely resembles that cited from the official regulations for French schools given below.

Belgium also possesses a secondary school of practical agriculture at Huy, and two secondary schools of horticulture and agriculture, at Ghent and Vilvorde. Among private institutions the agricultural school of the Christian Brothers at Carlsbourg teaches agriculture, horticulture, and brewing, by means of very complete installations; the Agricultural Institute of La Louvière is the competitor of the Carlsbourg School, and receives, like the former, a subsidy from the State.

Secondary agricultural education for young girls is imparted in about 10 domestic training schools (écoles ménagères), generally very well fitted up, established by private persons and subsidized by the State.

Higher education is imparted at the State Agricultural School of Gembloux, founded in 1861 and maintained at the expense of the State. A free agronomic nonsubsidized institute, belonging to the faculty of sciences of the University of Louvain, was founded in 1878 on the model of the National Agronomic Institute of Paris. These two establishments issue the diploma of agricultural engineer. The curriculum covers

three years; a fourth year, which is not compulsory, prepares for specialties, such as agronomy, sylviculture, and agricultural industries.

To agricultural education may be linked the State school of veterinary medicine, of Cureghem, the only public veterinary school in the kingdom.

Education through public lectures is much diffused in Belgium, and has raised the technical education of the farmer to a very high level. Owing to the same, the use of artificial fertilizers, of oil cakes, and of various foods has been introduced, and the utility of machinery more generally admitted; the farmers understand the deficiencies of their education and the practical advantages of the new methods, and of the associations of credit, savings, insurance, etc., which have been recommended to them in those lectures.

The courses organized by the State are given by agricultural engineers or by teachers; a special official jury delivers, after examination, a diploma of certificated agricultural lecturer to the persons who do not possess a diploma of agricultural engineer. However, the greatest endeavors are made to unify the education and to intrust it to such teachers as have completed the full course of instruction leading to the specified diploma.

CHAPTER VI.

HIGHER EDUCATION FOR BUSINESS MEN IN THE UNITED STATES AND GERMANY.

[From a Report by Dr. J. Jastrow, of Berlin University.a]

The establishment of a commercial school of university grade, planned and now being carried into effect by a committee of the Business Men's Association of Berlin, as well as the reorganization of all the commercial schools under the municipal commission, make it appear desirable to gather the results of foreign experience and to utilize them to the best of our ability. Moreover, we have been well informed lately concerning commercial education in North America through a number of publications, which offer, on the whole, a correct view. It was not probable that, concerning a subject recently so well treated, a brief sojourn in America would enable a foreigner to make essential corrections in the view hitherto held, especially since the extended summer vacation of American institutions of learning is a most disadvantageous time for such studies. But it seemed a profitable task, though hitherto held of little account, to determine what position commercial education holds in the educational system of America, and what views prevail in influential circles concerning the value or lack of value of theoretical education in general.

In Germany the resolution to establish a commercial school of university grade in Berlin marks, it is true, an important turning point in the commercial university movement. Yet it would be saying too much to assert that the discussion concerning the value, or want of value, of a higher education for the practical business man in Germany is thereby closed. The conviction of the necessity of a commercial university for Berlin has gained ground so quickly and effectively because, after other cities had proceeded in this direction, Berlin could not afford to be left behind. If there are to be commercial universities in Germany at all, Berlin can not be without one. But about the question whether higher education is profitable for a merchant, every merchant has his own private opinion. The objections are raised that higher education cripples the practical sense; that a young business man, graduated from a university, will think himself too good to perform ordinary counting house or office work; that a class of "Latin tradesmen" will spring up who will look down with contempt upon the mere salesman. Now, since the claim for the Americans of practical sense has never been disputed, it must be of interest to hear something of what they think about this question.

My original intention had been to collect expressions of opinion of distinguished business men concerning the value of higher commercial education. But this became superfluous, since, at about the time I arrived in America, such a collection from the pen of Doctor Thwing, president of the Western Reserve University in Cleveland, Ohio, was published, and I had an opportunity to add to it during a long interview

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a Bericht über eine volkswirtschaftliche Studienreise durch Nordamerika. Den Aeltesten der Kaufmannschaft von Berlin erstattet von ihrem volkswirtschaftlichen Beirat, Dr. J. Jastrow, Privatdozent an der Universität Berlin. Translated from the Berliner Jahrbuch für Handel und Industrie, 1904, Band I.

with the author. Hence I restricted myself to supplementing the material offered in that book by occasional questions among merchants.

That the movement in favor of higher commercial education in America is pushing vigorously ahead is quite undeniable. Nevertheless, in that land of "self-made men" the opposition can not be said to have died out. In print and by word of mouth the objection is ever recurring: If of two young men,-who at the age of 17 or 18 leave the high school, the one enters a business office at once, while the other spends another three or four years in higher educational institutions, the former, at the age of 21 or 22, would be much superior to the latter; it would in fact be difficult for the college graduate to begin then a business career. This objection is scarcely comprehensible to us. Not even the most enthusiastic advocate of academic education for merchants in Germany would think for a moment of making a higher education a substitute for business apprenticeship (Kaufmannslehre).

During the preliminary work of planning the new commercial university of Berlin, it was at every step of the preparation considered as settled that the university should, as a rule, be open only to those who had already passed through their commercial apprenticeship (though others should not be unconditionally excluded). To make myself understood on this point in conversation with Americans was exceedingly difficult, because they did not know, as a rule, what we meant by "Kaufmannslehre," [i. e. business knowledge and practice]. A "commercial apprenticeship," as I tried to render our German term, is unknown in America. From the moment in which the young man leaves school and enters a business he is a clerk, as all his superiors up to the representative of the proprietor are clerks.

The American to whom our German business apprenticeship is explained is inclined to defend his native usage by saying that in America labor performed must be paid for and that through this circumstance the relations of a contract are entered into between the proprietor and his youngest employee; furthermore, that this very absence of an apprenticeship enables intelligent persons of the working force to rise to higher positions, and that this is an essential characteristic of American life. It was once said to me: "In our days it is not true to say of the German that he lacks political liberty, but still he lacks social liberty and equality, and an expression of this fact is that the business world is a class by itself, into which no one can enter who has not passed through the prescribed apprenticeship." But even these defenders of American conditions betrayed plainly, as I noticed, a high degree of admiration for a nation that could create and maintain an institution so pedagogically important as commercial apprenticeship, and whose younger generation is sensible enough to submit for a few years of their lives to the restrictions this apprenticeship necessitates. On the other hand, I did not succeed in arriving at a clear idea as to how the young man in America learns his specifically commercial profession. When I asked how a young man who had just entered a business acquired the practical business knowledge requisite to a successful career, if there was no one whose duty it was to give him instruction, the stereotyped reply was: "Oh, he must pick it up." This "picking it up" is, indeed, the great secret of American life, to unravel which a brief sojourn of only three months does not suffice. I can not, however, abstain from mentioning what a gentleman replied to me, who, though not a merchant himself, is in a position where he has many opportunities to acquire a knowledge of commercial life: "You do not understand how young people learn the mercantile profession without special instruction? The case is very simple. They never do learn it. It is a pity to see how thousands enter this calling and go to the bottom, and how it depends upon mere accident whether or not a young man acquires, during the first few years, the knowledge necessary for success in his career."

Admiration for the better education of the German commercial profession seems to be general among Americans, but concerning the chief means of that education they deceive themselves. Among otherwise well-informed persons I found the most

curiously exaggerated ideas of the excellent commercial educational system, or the well-organized commercial institutions to be found everywhere in Germany. Since the American, not having any system of commercial apprenticeship, is unable to think of commercial education as being anything else than theoretical, the fact of there being many well-educated young merchants in Germany is to him almost identical with the existence of a good commercial school system.

The relation between theory and practice in commercial education is, briefly stated, in the two countries, America and Germany, the reverse of what is generally imagined. Germany, the land of thinkers and dreamers, conducts its commercial education chiefly in a practical way; America, the land of practical men "par excellence," is obliged, for want of a system of apprenticeship, to resort to purely theoretical instruction, and precipitately devises and establishes new institutions of learning for this purpose. The great majority of American business men, it may be said, assign to-day not a lesser, but a much higher rôle to theoretical preparation for the mercantile profession, than do the most extreme leaders of the commercial university movement in Germany.

Among the answers I received to my inquiry, whether effects detrimental to their practical activity were not to be expected from an academic education of merchants, perhaps none was so characteristic as the one I received from the president of the board of trade of Wilmington, N. C., Mr. J. A. Taylor. The conditions of this city are about those of a middle-sized German city, with well-developed industries (cotton, turpentine, etc.). This representative of the board of trade made the reservation, that he judged from a comparatively restricted circle of experience, and then continued: "I believe that also anyone whose experience has had a wider range than mine will be surprised at this question from the lips of a German. I have read, I can not at the moment recall where, that the difference between England and Germany is this: That in England a son thanks God for having given him a father, while in Germany a father thanks God for having given him a son. Everywhere we hear that the superiority of the German mercantile profession is based upon the State's educational activity, upon its loving care for every kind of educational institution. And you become all at once apprehensive that of this blessing, which is the source of your wealth, you may have too much? How do you arrive at such thoughts? We would think ourselves fortunate if we could establish for our young merchants very many, very high, and ever higher institutions of learning."

Now, to tell the truth, the assertion that America does not know the institution of commercial apprenticeship at all, despite the assurance with which it was ever repeated in my hearing, must be taken cum grano salis. When a son after graduating from school enters the business of his father, the latter naturally, in America as well as elsewhere, will make the practical instruction of his son a matter of personal solicitude. Nor is it to be doubted, that in a country which does not recognize commercial apprenticeship, fathers who are friends will exchange sons for a few years in hopes of introducing in this way the young clerks into business better than if they entered wholly strange firms. I have been told positively that many a father prefers for his son the commercial apprenticeship of foreign countries, especially of Germany. These exceptions, however, which must be made to the assertion regarding the absence of commercial apprenticeship in America, perhaps make the difference between the two countries stand out more characteristic. In all such cases, however, methodical instruction in business practice is offered only to sons of well-to-do families; on the other hand, in Germany commercial apprenticeship falls to the lot of all, or at least the great majority.

Since in the lack of a regular apprenticeship system such exceptions in behalf of well-to-do persons will occur as a matter of course, it may be said that commercial apprenticeship, aside from the social seclusion so often emphasized by Americans, has also a socially emancipating feature (although it in its present form, in common with all other kinds of apprenticeship, still lacks organized arrangements for its utilization

by the extreme poor). A germ of a future general mercantile apprenticeship in America may be found in the many arrangements made by wholesale and large retail houses, which have for their object the continued education of all their employees, workmen included. Factory operatives' courses, such as the National Cash Register Company, of Dayton, Ohio, exhibited at St. Louis, are bound to lead to the conclusion, that the best educational medium is the factory itself, or office, not a school detached from the factory. There are also large business firms which make it their purpose to offer instruction to the young people and provide instructors for them (for instance, the well-known department store of Marshall Field & Co., of Chicago), although this example, as far as I could hear, has not led to a regular or formal development of the system.[a]

Academic education of business men in America not only plays a rôle in programmes of study, but is to a great extent realized already, for the academically educated merchant may be met with there every day. In Germany people underestimate the wide extent of higher commercial education in America, because, as a rule, only those higher institutions are taken into account which provide for commercial instruction in separate departments. Such commercial departments are for instance:

The Wharton School of Finance and Commerce, University of Pennsylvania; the School of Commerce, Accounts, and Finance, New York University; the Amos Tuck School, Dartmouth College; the College of Commerce and Administration, University of Chicago; the course in commerce, University of Wisconsin; the College of Commerce, University of California.

Concerning commercial departments in the University of Illinois, in the University of Minnesota, and in Leland Stanford Junior University I have not been able to ascertain particulars. Inasmuch as higher commercial education is included in the preparation for the consular service, and this is a part of the diplomatic service, I may mention the School of Diplomacy (to the best of my knowledge the only one in the world) connected with the law faculty of the George Washington (formerly Columbian) University, Washington, D. C., (department of jurisprudence and diplomacy).

All these institutions are comparatively young. Even the oldest, the Wharton School, which is a part of the University of Pennsylvania, forming its commercial department, does not go farther back than 1881, and the others are all much younger. But the circumstance of young merchants, as well as future lawyers, physicians, etc., seeking their academic education in a university had ceased to be a rarity long before such separate institutions were established as are mentioned above. In all branches of wholesale business are found persons who have graduated from a university and secured an academic degree (A. B.).

The true appreciation of this fact is made difficult in Germany, on account of the seemingly ineradicable notion prevailing there that an American university is no more than a German gymnasium, and the American degree of bachelor of arts about equal to the graduation diploma from a gymnasium in Germany. This latter view is only mistaking the American bachelor for the French "bachelier." Now as concerns the inferiority of the American universities, this conclusion is caused not only by an erroneous estimate, but also by an erroneous mode of inquiry. It is not possible to state what American universities taken as a whole are worth. They are not, like the German, regulated officially and forced into a prescribed form, which circumscribes the still far-reaching liberty of the teacher, but each is an organism of its own; each expresses the individual views of its founders and administrators. State franchises,

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[a] That, however, is the essential point. On the other hand, the assertion that in Germany commercial apprenticeship is the general usage must be taken with many allowances. For numerous cases may be found in which apprenticeship is nothing more nor less than a mere form in which is clothed greedy utilization of juvenile labor. But, adding here and deducting there, the difference remains that in one country commercial apprenticeship exists as a regular institution and that the other lacks this institution.

which here also exercise a certain influence, date from different years, and even to-day represent quite a variety of views in the different States of the Union. To-day there is in America a pretty well-defined group of universities which have a fully justified claim to being taken in earnest, and whose claim is in no wise denied by the European learned world. To these institutions belong Yale, Harvard, and Columbia, also Johns Hopkins University (which was founded for the express purpose of making higher education independent of Europe); the University of Chicago, almost too munificently endowed by its founder, Rockefeller, for competition with others; also State institutions like the University of Wisconsin, the University of California, the University of Michigan, and others.[a]

If, aside from these, there is a large number of inferior institutions using the same name of "university," if in the South, for instance, many institutions are called "colleges" [b] which rank far below a German gymnasium, these facts should not lead us to underrate the value of those mentioned above. In case there were, besides the 21 universities of the German Empire, a large number of inferior institutions of learning that could not be prevented from calling themselves universities, it would in no way diminish the value of the 21 universities. Such a state of affairs would simply oblige the investigator of German higher seats of learning to study each group of universities by itself. This obligation is in point of fact laid upon everyone who makes a study of higher educational institutions in America. When I said that to see an academically educated merchant in America is an everyday experience, the merchant who has his degree of A. B. from Yale, Harvard, Columbia, Cornell, or a similar institution of high standing is meant.

Though the errors that have arisen from confounding various institutions in America calling themselves "universities" may have been excusable in the past, they are so no longer, since Münsterberg in his book "Die Amerikaner" has given us a truly classical description of American universities.

For another reason, also, a general review of the relations to each other of the Ameri-

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[a] About five or six years ago the most important American universities formed an association, which is very exacting (wählerisch) in the admission of new members. Although in the list of members there are a few institutions the names of which—despite manifold opportunities—I can not remember having been mentioned when universities of the first rank were quoted, still the list on the whole gives a good idea of what in the American learned world may claim to be of first rank.

[b] Aside from the low standing of many colleges it must be remembered that the word "college" in America is not everywhere used in the technical sense of the term. Thus, for instance, hundreds and thousands of "business colleges" make use of it. It has also become quite customary to call private business schools or so-called drilleries colleges, as when with us such an institution would advertise itself as Schulze's "Handelsakademie," without being an academy at all. In late years sensible educators have begun to use the term "business school" in place of the more pretentious one; so that among people who look deeper the mere fact of an institution calling itself a school becomes a recommendation. In this connection I desire to call attention to an error often made in judging American educational institutions. It is emphasized that many a high institution accomplishes too little, and not noticed how the greater diversity often shows itself in the fact that many preparatory or secondary institutions run way ahead of the average course; that there are secondary schools (high schools) which reach up into the colleges, not merely lead up to it, as for instance the Central High School of Philadelphia, which, founded in 1837, is at present under the principalship of Professor Herrick. This school has a commercial department (high school of commerce) which is attended by 450 students out of a total of 1,650 attending the whole school. Here are read the commercial press, especially the London Weekly Commercial Intelligence and the consular reports of the United States Government. The students prepare scrapbooks under the guidance of their teachers. These methodically arranged scrapbooks furnish the basis for scientific beginners' work, which is selected with great pedagogical skill. The students range in age between 15 and 19. When leaving this school they are enabled to enter the second year of a college. The principal advises them to enter college (which from 10 to 12 per cent of the young people do), not the Wharton School, specifically devoted to commercial science, because he considers it better for their future career to pay great attention to general education. Still, most of the graduates seem to seek their college education in the Wharton School of Commerce and Finance; some enter schools of engineering, and still others enter a law school without first going to college.

can and German universities is indispensable, to wit, to answer the question: What position does an academically educated merchant hold in America? This review is best effected from a historic standpoint, since for both forms of organization there is found a common historical basis in the European university constitution of the middle ages. This ancient European university constitution recognized in the western European countries only three faculties, theology, law, and medicine. The preparation for these faculty studies was included in a traditional round of seven subjects of study, called the seven liberal arts, which were taught by the "artists" (professionals). Whoever had finished the course of the seven arts received the academic degree of Baccalaureus, and was then admitted to one of the three faculties. At the same time he was allowed to act as assistant to the "artists." In Germany the "artists" aspired to become an independent faculty, having the same standing as the other three, and they succeeded in this by being made the philosophic faculty. To this new faculty was assigned among other duties that of preparing teachers, as the three older faculties prepared clergymen, judges, and physicians. Although the aims of the philosophical faculty never were as sharply defined as this would indicate, and although to-day there is scarcely another definition possible than that the philosophical faculty represents all the branches of study not specifically assigned to the three older faculties, yet there is visible in this course of development the fact that the modern German universities have each become simply a cluster of professional schools, which have discarded all arrangements designed merely to serve general education (like the ancient corpus of the seven liberal arts).

The development has gone in the opposite direction in America. Here the ancient society of "artists" has not only maintained itself under the name of "college" but has been fostered with especial care. In imitation of similar English institutions, the Americans have made out of the former mere preparatory schools for professional studies an institution for general education, the principal instrumentality of that general culture which represents the educational ideal of the Americans. Thus the complete structure of the American university consists of two entirely separate parts: (1) the college having as a rule a four years' course leading up to the degree of A. B., and (2) a system of professional schools for theologians, jurists, physicians, secondary teachers, chemists, architects, and engineers; hence undergraduate work on the one hand, post-graduate work on the other. The American is perfectly clear about the fact that what has raised the "educated" man above the uneducated multitude is the general culture which he received at college, not the legal, medical, or other professional knowledge which he may have acquired for the purpose of his calling.

For this reason the position of an educated man in America differs vitally from that of one in Germany. That in America a college-bred man is not esteemed more than he who had to be satisfied with a lower grade of education, is not at all true. Aside from a certain arrogant bearing, which is perhaps the necessary concomitant of a strongly democratic constitution, as a certain excessive humility is the result of the opposite form of government it must be said that the American capable of judging knows very well how to appreciate the value of higher education in others. With us Germans a lawyer is valued higher than a cobbler because he is a lawyer, while in America he is esteemed higher only because, and in so far, as he received a general culture which enabled him to enter upon his professional studies. A law student who (as is sometimes the case) has gained admission to the law school without a college education is, indeed, considered merely an artisan in the trade of law; and contrariwise, persons who have finished their college education without entering a professional school, are everywhere the equals of lawyers, medical men, etc.

How far this ideal, determined by existing educational aims, is realized in actual life in America, I am unable to state after so brief a sojourn. But an educational system is characterized not only by the extent to which it is put into practice, but also by

the general views which are entertained regarding it whether these views are realized or only are striving for realization. If we compare the educational views of America from the standpoint of general culture with those of Germany, we have not the least cause for superior airs. In the German universities during the last few generations everything has been done away with that reminded of the former mission of the university as an institution of general culture. Even far into the 19th century there existed at least the theoretical requirement that the students of the three ancient faculties should utilize the philosophical faculty as an agency of general culture. When the requirement of medical students, for instance, to hear a course of lectures in logic and psychology was abolished, they were glad to be rid of an old and absurd formality (Zopf). In the same manner was viewed the obligation of law students to hear a certain number of lectures in the philosophical faculty. It may be quite right to say that these regulations merely existed on paper, and hence had no longer any significance. But at some point of their gradual relaxation we should have become conscious that those ancient requirements, which in their last stage had become ridiculous, had once had a very great significance, that they expressed the necessity of a general culture for the professional man. To-day in Germany the not very pleasing state of affairs exists in which professional men inherit a veneration which dates back to the times when professional training was indeed synonymous with general culture, and the members of learned professions emphasize this inheritance perhaps the stronger the less they can give evidence of the possession of a general culture themselves.

It is therefore quite comprehensible that in opposition to the attempts at Europeanizing the American universities there is noticeable a counter current. During the proceedings of the great St. Louis congress of the learned world, and in many conversations among its participants, the opinion was strongly expressed on the part of Americans that there is no occasion "to reform away" an institution like the college, which has been historically developed on American soil.

In the light of this background of general college education the American commercial schools are better understood. The American university organization including (*a*) a college and (*b*) a professional school system, the American higher commercial school movement may either aim at making the new educational agency merely a new modification of the college, or at establishing a new professional school by the side of the old ones. The Americans have chosen the former in almost every case, and have thereby given the movement that characteristic feature of aiming at general culture. Even the Wharton School, at Philadelphia, from whose name no connection with the University of Pennsylvania could be surmised, gives in fact no other than the same college education that is offered by the university, but in a form more adapted to the future business man, especially by laying stress upon branches which will be of use to him (political economy, exchange, finance, etc.). This appears more plainly still in the organization of commercial departments like that of the University of Chicago, which give external evidence of their parallelism to the ordinary college.

But since the American college (despite its stricter discipline, compared with the German academic freedom) does not tie the student entirely to a predetermined course, but allows him, especially in the upper grades, a wide selection of optional studies, the future merchant has an opportunity at every well-equipped college to construct, as it were, a commercial college course of his own, by means of a judicious selection of studies. In fact, the university professors count upon having among their students a numerous contingent of young men who intend to enter business later. In Harvard I attended the opening lecture of Professor Taussig on general political economy. Without knowing that his guest was interested in the question of commercial education, he addressed his words particularly to that class of his hearers who intended to become business men. He told them that the importance of the study of political economy for the business man lay not in its guaranty to render money-making easier,

but in promising greater happiness for the future merchant, inasmuch as he would better understand and value the place allotted to him in the mechanism of human society.[a]

It is clear to university professors who advocate that instruction in political economy should have more reference to mercantile occupations, that the platform lecture is not a good substitute for commercial schooling. They lay stress upon illustrations taken from commercial life and the like solely because they see that, according to their pedagogical experience, this is the best way to lead that class of young students to gain a general culture, of which the higher commercial profession stands so much in need. If at any of the American universities a commercial department parallel to the general college course is established, it is essentially only an effort to make general education palatable to the students. On the whole it may be asserted that the colleges of general culture, so far as they are concerned with the mercantile profession, and the specific higher commercial schools, have the same purpose. In the city of New York there are two universities, Columbia and the New York University, the former without, the latter with a separate higher commercial department. But for the purpose of commercial education, the latter is not necessarily preferred. The general advantages which the Columbia is said to have, give to this university the preponderance also in the eyes of those who primarily seek commercial education. And if the deliberations now going on at Columbia end in establishing a separate higher commercial branch, it would not in the least mean a revolutionary change, since for future merchants likewise general culture would be the chief educational aim.

An exception to this system is found, so far as I know, only in the Tuck School at Dartmouth College, Hanover, N. H. This seems to be the only American higher commercial school which is exclusively arranged for postgraduate work—that is to say, it is a professional faculty, side by side with the law and medical faculties, for students who have graduated from the college. I regret very much not to have had time to accept an invitation from a former teacher of this institution, and to study it myself. According to all I heard about it, the course of study, which goes very deeply into special branches of commerce, seems to have had for a result that the school is not frequented by future merchants, so much as by students who, besides the opportunities for general culture, make use of this opportunity to prepare themselves for professorships in higher commercial schools. If this be true, Dartmouth would have solved another and hitherto almost wholly neglected problem, that of the professional training of commercial school teachers.

If the views here expressed be accepted, namely, that the American higher commercial school is in the main only a hybrid college provided with a certain mercantile bait, the movement in favor of higher education for merchants is essentially only a part of a much more extensive movement for higher education in general, intended to draw larger numbers of students into the fold of the college. In that country, with a population of the most varied descent, representing the most different kinds of education and lack of education, the American college, whose diversity and capacity for adaptation surprise us, is, comparatively speaking, the most homogeneous element of American culture. College men, in the true sense of the word, form among themselves a

[a] Listening to other opening lectures gave me opportunities to inform myself of the general level of university instruction in America. The opening lecture in Harvard, mentioned above, was intended for the first semester of the freshman year, and did not differ essentially from the first lecture of a semester in a German university. In Yale I heard a similar lecture by Professor Emery, and in Columbia one of the first of Professor Seligman's. In the two last-named institutions the level of the lectures (though delivered before somewhat older students) was perceptibly lower, but apparently only because the professors thought it proper from pedagogical motives to proceed cautiously in the lectures of the first semester. The libraries of reference in the study halls, which I examined at Columbia, Johns Hopkins, and the University of Pennsylvania, did not contain mere school text-books, but had the aspect of university study. I received the same impression from the detailed information given to me by Dr. Alvin S. Johnson (Columbia) concerning his course in the history of economics.

certain community of culture, while those who have not been to college not only lack its cultural influence, but also lack for their degree of education a standard of measurement which may indicate in a general way a community of education (such as is indicated with us by the title "graduate of gymnasium," or the diploma of "one year's voluntary army service"). Whatever advantage the American expects from a good theoretical education he ascribes to the college. When a father tries to convince his son that anyone who intends to make money must first learn something, he has no other way to that end in mind save going to college. Hence the college is the ideal of American cultural life. The land is hungry for college education. * * *

It must be admitted, however, that this movement has spread to a different extent in different branches of business. According to my experience opposition to college education is greatest among merchants or traders, less among manufacturers, simply because among the latter learning is a watchword, and to an American technical methods and other theoretical knowledge are much more an undivided field of intellectual effort than with us. A very pretty story is told of how a distinguished American silk importer illustrated the importance to a merchant of learning, by an example taken from his own branch of commerce. "There was a time when the people of Lyon in France thought they understood everything that concerned silk manufacture, while the men of Krefeld in Germany, and of Zurich in Switzerland, thought they understood all that better. Krefeld never attempted to learn from Lyon or Zurich, Lyon never from Krefeld or Zurich, and Zurich never from Lyon or Krefeld. But the American silk manufacturers knew that they did not know all that could be known of this branch. So they sat at the feet of all three, and learned from each. That is the chief reason why the Americans made such rapid progress in so short a time; they were open to conviction."

Especially in the banking business opposition to higher education dwindles more and more. In the New York Stock Exchange a college-bred man is no rarity. But what is more important, if you talk with a member of the exchange who has not enjoyed a higher education he will never recommend for his sons a school education such as he had to content himself with, but will have them go to college. The owner of one of the first New York banking institutions, who just at the time of my visit was debating with himself as to whether or not his son should enter a college, said to me as follows: "I do not belong to the college enthusiasts. I see plainly that the argument in favor of a college education for a future business man may be met with weighty counter arguments. But despite it all, I also see that the decision will be in favor of the college. For if my son does not attend a college he will, later on, have friends who have received a higher education, and in this circle he will be the only one without it. This is so important for the future that it will probably decide me to send him to college, although I might be convinced (which, however, is not exactly the case) that a college education is of no special use to a banker." Before I returned to Europe I met the son of this gentleman as a freshman at Yale, and one of the American political economists to whom I related my conversation with the father said: "That man has grasped the situation. It is all up with the high position of the American business men in the life of the nation when they fail to acquire a higher education."

In no branch of business, however, is the desire for the academic education of the younger generation for the leading positions so almost universal as in the transportation business. Here the movement for higher education finds no opposition. This is owing to the peculiar position which distinguishes those charged with organization in the transportation business and their education. Viewed from the standpoint of the theoretic education required for an organizer, the system of transportation has one peculiarity which it shares with absolutely no other branch of business activity. The specific mark of distinction of an organizer may be said to be essentially this, that he understands how to secure execution of his orders even in his absence. There

is only one branch of business in which personal absence of the manager results from the very nature of the business operations. That is the branch which has to effect changes in space, i. e., transportation. In all other branches of business there may or may not be, far from the central establishment of the owner, depositories, warehouses, branch houses, agencies; but in the transportation business the absolute requirement is that the cars proceed to a distance, and that hundreds of stations should work according to the same system, which system can be contrived and set into motion only at the central office. Hence, transportation business is the highest school for business organizers. A talent to devise for the concrete requirements of practical life rules and regulations which are rigid enough to secure uniformity, and elastic enough to guarantee their general applicability, is required and utilized, i. e., in the business world the business of transportation is that point where the demand for the faculty of abstract thought is most acutely felt by the man of business.

Never before have I become so conscious of the high price we in Germany have paid for making the business of transportation a Government affair as when I viewed the apparently far-removed subject of commercial education. In America not only the entire system of railroads is in the hands of private individuals, but also the telegraph and telephone systems. The fact that railroad presidents are not State officers as in Germany, but business men, and that a not inconsiderable number of wholesale merchants and manufacturers go through the school of transportation business in their younger years, or give it the results of their experience in later years, has given the American business world quite a different position in the social structure of the nation. One only needs to imagine what a different aspect our German business world would assume, how differently it would be regarded, if railroad, telegraph, and telephone men were part of that world. I will not have it understood that I am in principle opposed to government acquisition of the means of transportation, but one need not be an opponent of state railroads in order to emphasize the social dislocation which has taken place with us compared with other nations. One may be in favor of the purchase of an object and yet be keenly conscious of the high price involved. At any rate, it was necessary to point out the vastly different social aspects of the business men of the two countries when the attitude of the American business man toward academic study was to be explained.[a]

A certain intimate connection between the business world and the scientific world displays itself in America not exclusively in the form of an aspiration for academic education for the future generation. The present generation of business men also participates in the literary life of the nation more actively than in Germany. More frequently than with us we meet in scientific periodicals with essays upon American affairs written by business men. Thus, for instance, last year a practical banker (Ch. A. Conant) discussed "The Limping Standard" in one of the most noted periodicals devoted to political economy, "The Political Science Quarterly." A book valuable for its abundance of practical information concerning the frauds perpetrated in speculation, even though it may not be considered strictly scientific, is the one of John Hill (of the Chicago Board of Trade) entitled "Gold Bricks of Speculation." When on the occasion of the centennial in 1895, a memorial on American trade was published ("One Hundred Years of American Commerce," edited by Chauncey M. Depew), a large number of American business men contributed to this literary enterprise. The history of boards of trade was treated by Orr, president of the New York Board of Trade. The director of the well-known Bradstreet Company (Ch. F. Clark) wrote on more gen-

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[a] The inquiry of Thwing, mentioned before, nevertheless contains also a considerable number of replies from railroad men against college education (see pp. 68–74 of his book); but this may be attributed to an innate sense of justice on the part of the author, who attempted to represent the opposite side of the question generously, so as not to appear to slight it. But even after reading this side of the question, there is not a doubt of the fact that by far the great majority of railroad business men favor academic education.

eral subjects. Foreign trade "from the standpoint of a trader" was discussed by Ch. K. Flint of the firm Flint, Eddy & Co., of New York; Wall street was discussed by Y. P. Townsend, president of the Bowery Savings Bank; Advertising in America, by F. W. Ayer, of Philadelphia, of the firm N. W. Ayer & Son; the telephone received attention from the president of the American Bell Telephone Company, Y. E. Hudson, of Boston; W. Lawrence, president of the National Wool Growers' Association, wrote on American wool production.

Without pronouncing upon the average value of these contributions, it must be acknowledged that there is in them a great deal of information which one would look for in vain in the scientific writings of theoretical men. I had been assured that there was no literature in America on American boards of trade which would give me as much as an entering wedge for further investigations. In the memorial mentioned, however, I found this wedge. At any rate, this literature shows that the business profession is itself beginning to use the pen concerning its own affairs. In Germany such a book as the one mentioned would be written almost exclusively by secretaries of boards of commerce and university teachers, among whom a merchant as author would feel like Saul among the prophets.

That part of the American business world is interested in higher commercial education, is anxious to guide scholarly investigations toward subjects of interest to business men, in order to show by discussing them what significance theoretical knowledge possesses for practical life. The means to this end is the prize contest. In Chicago the wholesale clothing firm of Hart, Schaffner & Marx has offered four prizes, one each of $1,000, $500, $300, and $150, for essays on the following seven themes:

1. Causes and extention of the modern industrial progress in Germany.
2. To what causes may be attributed the late success of American competition in European markets.
3. Influence of trusts and combinations upon the condition of American laborers.
4. Economic advantages and disadvantages of the present colonies for their mother countries.
5. Causes of the panic of 1893.
6. What form of education can be recommended for the industrial uplift of the American wage-earners?
7. What educational method is best suited to future business men?

This competition is open, as it seems, to scientific investigators as well as to students as an exercise; the first two prizes are intended for persons who have graduated from a college within the last ten years, the other two for students.

Participation of business men in the movement for higher commercial education is, however, active in a still stronger sense of the word. Distinguished representatives of the American business world have ascended the lecture platform, in order themselves to teach the young men what they thought they ought to know. The University of Chicago has printed the lectures which were delivered in its College of Commerce and Administration by practical business men on their own profession. These lectures form the first volume of the publications of the college in 1904. [The author here quotes the list of contents, giving names, positions, and subjects of the lecturers.—TRANSLATOR.]

Almost equally significant with the participation of these business men in college work is their reception by the representatives of the learned world. The editing of this collection of lectures was done by Prof. H. B. Hatfield, the introductory essay was written by Prof. J. L. Laughlin. Professor Hatfield in his preface admits that he is in no wise an enthusiastic adherent of the opinion that the university should make it its mission to educate for business. "But," he continues, "though the university can not undertake to educate for business, it can itself be educated by business men, who bring to it new points of view, an intellect of refreshing vivacity, helpful criticism, and activity of mind, even—suggestive errors, all of which is adapted to shake the

faith of the man of academic learning in dogmas, or at least induce him to examine anew the claims of his dogmas to sovereign authority." Reaching back into the history of political economy, he reminds us of what this science owes to Ricardo, the stock broker, to the banker Newmarch, the manufacturer Montchrétien, the merchant Gresham, etc. Among American economists, Professor Laughlin certainly belongs to those who most decidedly adhere to the demand for exact definition, and it is by no means an accident that the representative of this tendency has taken the leadership, as it would seem, in drawing practical men into the debate. Cooperation of abstract thinkers and men of concrete business practice is certainly a union creditable to both parties.

In consequence of the active and widespread interest in higher commercial education, it was but natural that the great associations in the American business world should begin to move in the matter. That the American banking interests advocated higher education, and that the American Bankers' Association expressed itself in this sense, is well known even in Germany. In 1904, during its annual meeting, the National Board of Trade passed unanimously a resolution for the establishment of commercial departments in universities. Here also was shown how far academic education has already extended among business men. The mover of the resolution, Doctor Holland (Pittsburg) could state the case briefly, by saying: "A large number of you gentlemen are college men yourselves." The present attempts at establishing in Columbia University a department of higher commercial education are aided by the New York Board of Trade.

After all that has been said the question may arise among us whether or not higher commercial education in America is not on the road to become altogether too theoretical. To settle this we may be reminded, in the first place, of the fact that college students who contemplate entering on a business career often establish a certain connection with business life by using their vacation to work in business houses. In the Wharton School of Finance in Philadelphia an employment committee arranges for such employment. Not only for the purpose of preparation for future employment, but also for the purpose of present support, the earning of money plays an important rôle with many students. The Americans themselves are not quite agreed in judging this part of college life. Generally the college is considered an aristocratic institution, and the young dandy, as in England, is often looked upon as the typical student, who goes to Harvard or Yale simply to enjoy college life, or, as we say, "sich dort Studien halber aufhält." Indigent students who get through their college life by working hard and wrestling with poverty are thought to be exceptions. But one hears the opposite view frequently, namely, that the combination of study and earning one's livelihood is characteristic of America; that the great number of students who earn their own support is the most convincing proof of the general accessibility of the college, and gives to the college a downright democratic character. During the year 1904 Prof. Orlando F. Lewis, of the University of Maine, made the attempt through an inquiry to ascertain what proportion of students earned their own support. The answers differed greatly. For some colleges the percentage was 60, 70, and even 90; Chicago estimates it at over 50, and even universities of a certain aristocratic tradition, like Cornell and Yale, reported estimates of 25 and 10 per cent. That in this regard America entertains different social views from ours is beyond all doubt. I have not been satisfied with listening to stories of students earning their livelihood as waiters, and this even in dining rooms of universities where they serve their own fellow-students. I have seen with my own eyes that this is true, and hence have no occasion to distrust the often made statement that outside of the time of serving meals the intercourse between servitor and served shows no trace of this relation. However, I believe the assertion that this earning one's living does not affect the social position of the students rests upon an optical illusion of the Americans. For from the highest social stratum of American students, the fraternities, are already excluded so many strata

standing socially high that the exclusion of the poorest, and especially the exclusion of waiter students, is not noticeable.

Above all, there acts as a mighty counterweight to making the higher education too theoretical the whole American life. America is, despite all, the business continent. He who there grows up is reared in a commercial atmosphere. Hence, what I have said concerning the estimation in which theoretical knowledge is held there, is not to be understood to mean that I intended to call in question that characteristic of American life. But the statement that in America the dollar is king is made so often that it would seem quite proper for the observer to designate the limits within which it is true. In the sense in which such statements are made concerning America to-day, they are untrue in two particulars: First, they create the impression that the land of the dollar hunters values only immediate gain, and has no mind for a scientific education which, though not offering immediate returns, guarantees future business success. This neglect of culture, it may be said, is found here and there, but it is neither as general nor as great as is believed in Germany.[a] The contrary opinion, it seems to me, is spreading throughout the country. Aside from that, in the second place, it is not correct to say that in American life the possession of material things alone is valued. The worth of the ideal possessions of mankind is recognized also on the other side of the ocean. And in the American movement in favor of higher commercial education the moving force is not only the desire for better equipment for making money (although this desire is quite praiseworthy), but also the fact that the representatives of the business world wish to secure their share of the ideal possessions of the nation.

In briefly summarizing my observations concerning commercial education, I may say that I left America with other views than those I had when I landed. I had come to hear what disadvantages the practical Americans apprehended from such higher education for business men as had been planned for Germany, and I found that the most essential difference between American and German commercial education consisted in one thing only, namely, that we have practical preparation in the form of commercial apprenticeship, while in America there is no such arrangement. In emphasizing this point, I mark the chief result of my investigations in America. Furthermore, that this circumstance does not play a rôle in the hitherto existing literature on the subject, is owing to the fact that theoretical instruction and the system of apprenticeship belong to two separate branches of literature, while to the observer who travels from place to place in order to learn the conditions prevailing, and not to write a book, the whole subject unfolds itself in all its aspects.

If this difference between American and German commercial education be recognized as fundamental, and considered as vital, it follows that the highest principle governing the movement for higher commercial education in Germany must be not to repress, even indirectly, the system of apprenticeship. Then we may, with reference to any apprehended injurious effects of theoretical instruction, quietly proceed in our plans, being sure of the backbone of practical preparation.

The second result of my journey is the recognition of the fact, that the higher education of the American business man depends primarily not on attending higher commercial institutions, but on his participation in college life in general. This fact places the problem of higher commercial education even for Germany in quite another light.

The question is, for what purpose is an academic education demanded in Germany for members of the business class? I do not believe that the chief purpose is to fur-

[a] In Germany, Andrew Carnegie's utterances in this regard are considered as characteristic of public opinion in the American business world. But Thwing has shown us (pp. 29–42 of his book) that not even Carnegie's views are as consistently antiacademic as is commonly believed. Furthermore, Carnegie stands alone among his associates in his views, so far as they refer to higher commercial education. The speaker during the commercial congress who advocated so warmly and so successfully the establishment of higher commercial colleges, came from Pittsburg, and claimed to be a personal friend of Carnegie. That persons who are his intimate friends do not share his opinion in this regard, is quite in accord with my own observations.

nish them with the positive technical knowledge needed in the prosecution of their business. According to my ideas, the movement has arisen primarily from the desire to open the portals of higher institutions to business men for a general higher education. Our time is groping in the dark for a new ideal of culture, which will of course include the traditional group of learned men of the nation, but will not permit them to pass for the exclusive possessors of culture. The commercial class in Germany, intending to establish commercial universities, demands with us (as is very clearly the case in America) its part in the highest national culture, the essence of which consists in this, that in aspiring to the highest it recognizes no scholastic restrictions.

If this be considered the essential aim of the German commercial university movement, the question with which this report began—namely, whether in practical America injurious effects are apprehended from the introduction of academic education for business men—can not be put. For as circumstances now are in America, academic education of business men, that is, fellowship of highly educated business men with cultured men, is already an accomplished fact. And however paradoxical it may sound, I can not formulate the impression I am bringing away from America in any other way than by saying that for prominent German business men also a university education is needed, because otherwise they will fall behind their American colleagues, especially in the estimation in which they are held by other members of the nation, an estimation which conditions their vital power and spirit of enterprise.

But whether in particular for the future German commercial university, especially for that in Berlin, much may be borrowed from the American system of education, is difficult to say, owing to the great differences between the two systems. America has especially favorable conditions for the solution of this problem. On the one hand, it has the college, which offers general culture to all professional men in a form adapted to the commercial class. On the other hand, the premium which in the social life in America is set upon fellowship with the educated classes, is not high enough to justify apprehensions of educated business men being designated, as in Germany, "Latin merchants." Of the intensity of that fellowship we have no clear conception in Germany. Whoever is a graduate of Harvard remains a voting member of the university for life. He has a vote five years after his graduation upon all decisive questions submitted to the alumni. He always remains the classmate of all the members of his date found in the pulpits and the courts of the country. Everywhere in American cities university clubs are formed, to which only A. B. men have admittance, and in which merchants with a college education are as well represented as the members of professions in respect to which, by tradition or necessity, an academic education is taken for granted.

This is an end which we can not reach with our German commercial university movement. As for America, the existence of the college is the starting point for all academic education of business men, so for us in Germany there is the negative fact, that every institution for general culture which goes beyond the gymnasium, formerly existent in the universities, has been lost to us. The highest culture is, with us, connected with professional schools, and the commercial universities will have to be professional schools also. Hence these schools will be obliged to offer a high commercial education which includes as many elements of general culture as possible and place that culture in the foreground. The consciousness of belonging to the scholarly classes, which may be comparatively harmless under American circumstances, would lead in Germany to an embittering division of the mercantile class into two sections, which would change into its opposite any advantage derived from the movement for higher commercial education.

Otherwise expressed, I believe that one of the essential objects of the German movement for higher commercial education has been secured already in America; that we, however, can not reach that object in the same way, but must strive after it in an opposite way.

CHAPTER VII.

EDUCATION IN LIBERIA.

By GEORGE W. ELLIS,
Secretary of U. S. Legation at Monrovia.

The great drift of economic effort is toward the Tropics. The indications are that the Tropics will furnish the battlefield upon which the future is to witness the struggle of the nations for the industrial mastery of the world. There is little doubt but that this economic effort will be accompanied by an intellectual movement that will work mighty changes upon the mind and heart of Africans. With the passing of the years the control and development of tropical peoples and the utilizing and exploitation of tropical resources will grow in increasing importance to the civilized nations of the earth.[a]

I. IMPORTANCE OF WEST AFRICA.

The growing congestion of economic and population centers in western nations is demanding more and more the services of the lands and resources of tropical peoples. Africa is the continent of the future, and West Africa is the most inviting commercial field of our time. It is populated by millions born to trade. Unrivaled in the productivity of its soil and unsurpassed in the variety and abundance of its products, West Africa is the home of much that may be utilized for the sustenance, comfort, and delight of man.

Tropical nature is wont to sustain the idle and the indolent without the dint of labor. The tendency of the Tropics is toward extravagance. In West Africa the tropical area is so vast that this extravagance is on the largest scale. For these reasons, with the the exception of Liberia, the nations of Europe divided West Africa among themselves. Every effort is being put forth to minimize the dangers of the climate, to commercialize the country, and to harmonize its people with the laws of civilization. And with all the difficulties encountered, West Africa is slowly but surely progressing.

II. NATURAL IMPORTANCE OF LIBERIA.

Liberia possesses about 5 per cent of the West African coast line. It is an independent negro republic, dominated and ruled entirely by black men. It has maintained unimpaired its sovereignty for fifty-seven years.[b] Strategetic in position, and with an area of 48,000 square miles, it is so rich in natural resources that travelers have called it the "garden spot of West Africa." With thirteen ports of entry, it extends 350 miles

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[a] Benjamin Kidd, The Independent, September 8, 1894.
[b] Hand Book of Liberia, by S. D. Ferguson, jr.

along the coast and 250 miles into the interior, with an aggregate population of 1,500,000, of whom 25,000 are emigrants from the United States and their descendants. Planted by the American Colonization Society in 1820, Liberia declared its independence in 1847. In language and institutions the Liberians are strongly attached to the United States. Their efforts to educate themselves and to assimilate their native brethren ought therefore to be of interest to the American people.[a]

III. SETTLEMENTS AND POLITICAL DIVISIONS.

A fair idea of education in Liberia requires some knowledge of African conditions, the political divisions, and the local distribution of the ruling population. The Republic is divided into four general divisions, called counties, corresponding to American States, represented by senators in the national government. The counties are subdivided into townships and incorporated cities. The law defines the township to be 8 miles square. It is surveyed as fast as the Americo-Liberian requires it from the public domain. The ruling population is distributed as follows in the 4 counties and 1 territory, along the coast and up the several rivers of the Republic:

Americo-Liberian settlements.

Counties.	Number of settlements.
Montserrado	24
Bassa	9
Sinoe	6
Maryland	7
Cape Mount	2
Total	48

IV. LIBERIAN EDUCATIONAL SYSTEMS.

Liberia has three separate systems of education operating within the Republic, each under different management and supervision and deriving its financial support from a different source. There is one system maintained by the Methodist Episcopal Church of the United States; another by the American Protestant Episcopal Church; and still another by the Liberian Government. This is explained by the missionary spirit which entered into the causes leading up to the birth of the Liberian Republic. It will not be contended by those familiar with educational work in Liberia that even all the schools comprehended in the three educational systems are sufficient in all respects to meet the educational demands of the Republic. They have thus far, however, been sufficient to protect the institutions of the Liberian people from the downward influences of the presence and daily contact with backward peoples; they have demonstrated their service in producing leaders in Liberian thought and action and afforded the surest and safest means of perpetuating the highest and best interests of the State. Under discouragements, difficulties, and dangers peculiar to West Africa, Liberian educators, against great odds, are performing a valuable service for the Republic and the African.

V. DISTRIBUTION OF THE METHODIST SCHOOLS.

The Methodist educational system partly indicates American interest in the future of Liberia. The system is a unit within itself, containing every grade from the primary to the college course. Its schools are scattered throughout the Republic. They are to be found in every county. The committee on education reported to the Liberia

[a] Whitaker's Almanac, 1904.

Annual Conference of 1904, 26 schools, with 43 teachers, and with an attendance of 932 pupils. They are distributed among the counties as follows:

Location and name of institution.	Pupils.	Teachers.	Schools.
MONTSERRADO COUNTY.			
College of West Africa	119	8	1
Mount Olive	.....	1	1
Powellsville	11	1	1
Johnsonville	53	1	1
Crawford Mission	.....	1	1
Caldwell	35	1	1
White Plains Industrial School	17	2	1
White Plains School	23	2	1
Crozierville	40	2	1
Harrisburg	25	1	1
Careysburg	28	1	1
Total	315	21	11
BASSA COUNTY.			
Lower Buchanan	25	.....	1
Central Buchanan	18	1	1
Upper Buchanan	40	1	1
Edina	77	1	1
Fortsville	25	1	1
Total	185	4	5
SINOE COUNTY.			
Greenville	80	2	1
Sinoe River Industrial Mission	42	2	1
Fishtown	22	1	1
Total	144	5	3
MARYLAND COUNTY.			
Cape Palmas Seminary	110	3	1
Big Town Boarding School	20	1	1
Mount Town	42	1	1
Garraway	22	1	1
Plebo	14	3	1
Wissika	26	2	1
Barraka	18	2	1
Total	252	13	7
Grand total	932	43	26

Of the foregoing schools 11 are in Montserrado County, 5 in Bassa County, 3 in Sinoe County, and 7 in Maryland County. At one time both the number of schools and the number of pupils were larger than those reported in 1904. About 50 per cent of the students in those reported are native Africans. In an address delivered in Allegheny, Pa., November 11, 1901, the superintendent of Methodist education in Liberia, speaking of the Methodist College, said: "It has as auxiliaries 33 elementary and grammar schools, enrolling 1,223 pupils. Of this number, 522 represent those who were born in heathenism. These are among our brightest and most promising students."[a] During the year 1903, six schools were closed. They were reported to the annual conference of 1904. The lack of funds is no doubt the chief cause for the closing of the six schools.

The average attendance of the schools is about 1,000, and is nearly equally divided between the Americo-Liberian and the African. In the October issue of World Wide Missions, 1904, the superintendent states that "about 1,000 students are enrolled in our schools, including both aborigines and Americo-Liberians. The former are increasing, constituting now nearly 50 per cent of our enrollment."[b]

[a] Address by superintendent in Allegheny, Pa., November 11, 1901.
[b] World Wide Missions, October, 1904.

VI. THE COLLEGE OF WEST AFRICA.

The great center of the Methodist school system is the college of West Africa, located at Monrovia. It was founded in 1839 under the name "Liberia Conference Seminary," with Rev. J. A. Burton as principal. Since that time the institution has suffered many interruptions on account of the illness and death of the teachers and other obstructions. Yet it has gradually been improved as a center for higher culture. Beginning as a seminary with 3 teachers, it is now a college with 10 instructors and several departments—theological, industrial, English, normal, college preparatory, and collegiate. It occupies four buildings, with an average enrollment of upwards of 100 students. The president of the college, in The Christian Advocate of September 29, 1904, described the institution in these words:

The College of West Africa is one of the few educational centers in Liberia. It is the one central school of our entire Liberian work. It has an interesting history, contemporaneous with the national life of the Republic. A goodly number of leading men and women of the country were students there in their youth. Among its former pupils are Methodists, Baptists, Episcopalians, and Presbyterians.

VII. HISTORY OF METHODIST SCHOOLS.

The complete history of the rise and growth of Liberian Methodist schools, though interesting, can not be given here. It is interwoven with the larger history and the more thrilling story of the church's first efforts to Christianize and develop the African upon his own continent. All along the way is marked by the sacrifices of the heroic and services of the brave. I mention the history of these schools more as a deserved tribute to their founders than an actual attempt to trace the real stages of their progress.

For the present purpose it is sufficient to note that it was the policy of the Methodist Church to maintain schools in connection with its missions and its churches, and to encourage self-support. The first missionary, Melville B. Cox, planned to establish schools and missions along the Liberian coast and at the chief centers of population as early as1833.[a] He only lived, however, long enough to begin his plan. Five missionary teachers soon followed after his death to take up his labors at Monrovia and elsewhere in 1834. Suffice it to say that the schools had so increased that about that time a superintendent was appointed in the person of Rev. John Seys, who afterwards became minister resident and consul-general of the United States at Monrovia. The White Plains Manual Labor School was established at White Plains. Mrs. Ann Wilkins opened a school at Caldwell. In 1838 Reverend Seys opened another at Heddington. At this time the Methodist schools, under 7 teachers, had 221 pupils. By 1842 the schools had increased to 13 and the pupils to 600. The Monrovia Seminary in 1853, under the principalship of Rev. James W. Horne, had 60 scholars and an assistant teacher. In 1854 Miss Caroline Brown began teaching at Cape Palmas. Miss Mary Sharp began her work among the Kroos soon after Bishop Haven's visit in 1876, and is still at Monrovia. Under M. Y. Bovard the interior was invaded and schools opened at Boporah and Gintemah. In 1884, when Bishop Taylor came to Africa, the work had somewhat declined on account of the absence of well-equipped teachers.

About 1888 the bishop established schools 100 miles up the Cavalla River, and 40 miles south, on a self-supporting basis. But they declined when the natives learned that the Liberians were receiving American aid while they were not. These schools had reached the point where they had at each station a nursery mission for children under 6, to be taught English, the industries, and the vernacular, after the manner of Froebel's kindergartens.

When Bishop J. C. Hartzell came, about 1897, the Methodist schools received new impetus and were carried forward to their present high organization, efficiency, and proportions. The seminary became the College of West Africa, the culture center of a unified Methodist school system extending throughout the Republic. The work at the Cape Palmas Seminary was strengthened, and new blood and brains supplied to

[a] Missions and Missionary Society of the Methodist Episcopal Church, by J. M. Reid, D. D., vol. 1.

the Methodist educational institutions in Liberia. Though through sickness, death, and other obstacles the work at many points had been often interrupted in the past, the church seemed now determined to take up the broken threads and to see that the memorable words of the heroic Cox should not fail: "Let a thousand fall before Africa be given up."

VIII. ADMINISTRATION OF METHODIST SCHOOLS.

The administration of Methodist schools is in the hands of a superintendent, who is also president of the College of West Africa at Monrovia. The average school term is about nine months. There are only two seasons here, the wet and the dry. The former begins about May and ends with November, a period of about seven months. The latter includes the five intervening months, with variations at the dividing line. The schools generally begin in February and close with November. With some modifications the schools are fashioned after American schools. They have a mid-term vacation of a month in July, no doubt suggested by local conditions and the vacations of the English. Besides, they have the Christmas holiday, Thanksgiving, and the national holiday of July 26 in commemoration of the birth of the Republic.

At the close of the school term there are written examinations held by the teachers. But in addition to these, oral examinations in the higher schools are held in the presence of an examining committee, appointed generally by the trustees, and in the presence of the general public, suggestive of the public examinations held in the German industrial schools in the presence of an examining board appointed for the purpose.[a] In both the passing of the student depends upon the recommendation of the committee or board. But there is this difference, that in Liberia the students are open to questions from the general public. If this practice is open to objection in Germany, experience justifies it in Liberia, for the student is seldom embarrassed by the visitor desiring to display a mere smattering of knowledge at the expense of the student.

IX. SUPPORT AND TEACHERS IN METHODIST SCHOOLS.

The support for Liberian Methodist schools is mainly from the Methodist missionary board, and is included in the support given to missionary work in general. Some financial aid is rendered by the local church at Monrovia by supporting scholarships in the College of West Africa. The Liberian Government gives the White Plains Industrial School $500 annually. A few individuals in America give some food and clothing for native children, and still others support native scholarships in the College of West Africa and in other schools. Every now and then the superintendent, Dr. A. P. Camphor, visits the United States, during which time he solicits aid for scholarships in the Methodist College at Monrovia. These scholarships are $25, $50, and $100 per annum. It is largely in this way that the native children are supported in the Monrovia College.

The salaries for the support of Methodist teachers and professors are from the Methodists of the United States operating through their board in New York. Prior to 1880 the total allowance for missions in Africa had exceeded $37,000. The want of proper protection to mission stations in the interior, and the sickness and death of teachers, together with other difficulties attending the work, had led the general committee to reduce the appropriation for Liberia from time to time, until about 1879 it was as low as $4,500. The chief cause for these reductions was the desire on the part of the church in America to develop a church in Africa that was self-supporting. Under this policy the schools suffered very much. In 1880 the Liberia Annual Conference debated the question of establishing the autonomy of the church in Africa on account of these reductions in the appropriations. And though the proposition was finally rejected, the fact that it was considered no doubt very much affected the American church, because the board addressed an appeal to the Liberian conference to prevent the separation; and there is little doubt but that this effect worked its way into the appropriations, and thus much affected the financial support for teachers and schools.

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[a] Daily Consular Reports; report by Deputy Counsul Meyer, Chemnitz, Germany, 1904.

The teachers in the common schools are not given a salary, but are given about $75 per annum as a contribution to encourage them in their work. They are generally Liberians, and are engaged in some other means of support. This small contribution is a temptation to incompetent teachers to do inefficient work. The diversion of a part of the teacher's time to other work in order to maintain himself is fraught with great damage to the Methodist common-school system in Liberia. And yet it is far superior to what it has been at times before, in the efficiency of the individual school and in the general unity of the system. Much credit is due to Bishop J. C. Hartzell, who has strengthened the work at many points. The total appropriation for the Liberian mission now is about $13,000. From this amount the teachers are paid. The teachers in the White Plains Manual Labor School, the College of West Africa, and the Cape Palmas Seminary are generally sent out from America, and their salaries range from $300 to $1,000 per annum. The latest acquisitions which Bishop Hartzell has made for the Liberian work are in the College of West Africa, in the persons of Prof. T. R McWilliams, professor of science, and Dr. Ernest Lyon, American minister, in the department of theology. The scientific department in the College of West Africa, under Professor McWilliams, established by Bishop Hartzell, is the only one in Liberia, and its equipment for experimental work in chemistry and physics compares favorably with that of similar institutions in the United States.

X. PROTESTANT EPISCOPAL SCHOOLS.

Much that I have said about the administration, general features, difficulties, and sacrifices attending the rise and growth of the Methodist school system in Liberia is equally true of the Protestant Episcopal school system, and need not be repeated here. I shall call attention therefore only to some distinguishing and distinctive traits. Both systems express American interest in the ultimate destiny of this negro State. Both began operations in Liberia about the same time, the former in 1833, the latter in 1830; and under the influence of the noblest philanthropy both have built up by similar methods school systems which have for their purpose the realization of a common end.

XI. THE CHIEF PROTESTANT EPISCOPAL SCHOOLS.

The Protestant Episcopal system of schools in Liberia is grouped about four chief schools, the central one of which is the Hoffman Institute and High School at Cape Palmas. This is the most important institution in the work, and is generally known as Epiphany Hall. The hall has three departments, the high school, the collegiate department, and the divinity school. The collegiate department affords the students an opportunity for a liberal culture, and in the divinity school candidates for Holy Orders are trained for the work upon the ground. In 1903 there were 120 young men in the entire hall, under the efficient principal, Prof. P. O. Gray. During Professor Gray's five years' service the standard of the school has been much elevated, and its progress along all lines has been very marked. In the divinity school there were in the same year (1903) 9 candidates for Holy Orders. In 1904 there were 110 students in the hall, eleven of these being in the collegiate department and four in the divinity school. The important function discharged by the divinity school in the uplift of the mission work is revealed by nothing so strong as by the fact that one-half the clergy in the district are graduates from this department.[a]

In addition to Epiphany Hall there are three other important schools in the system, namely, the girls' school and orphan asylum at Mount Vaughan, near Cape Palmas, St. John's School at Cape Mount, and the girls' school at Clay-Ashland. In his report for 1904 the Right Reverend Bishop Samuel David Ferguson said of the girls' school at Mount Vaughan: "The management of the school has for many years been committed to the care of Mr. James J. Neal, whose efficiency, zeal, and devotion have

[a] Report of the Missionary Society of the Protestant Episcopal Church, 1904, p. 148.

brought that institution to the high level it has attained."[a] For that year there were 82 boarding and 19 day scholars. At the last annual examination, June 28, 1904, the girls gave evidence of the real service of the school.

St. John's School at Cape Mount is a school for boys, the superintendent of which is the Rev. Nathan Matthews, assisted very ably by Miss Agnes P. Mahoney, now acting superintendent. I have had the pleasure of visiting this school and can speak of its service and usefulness. It deserves the commendation given it by Bishop Ferguson in his report for 1904: "The superintendent, the Rev. Nathan Matthews, by his efficient management and devotion to the work, is effecting radical changes in the discipline of the school, elevating its moral tone, and setting it upon a higher basis for future usefulness." The enrollment for the year is 80 boys.

The girls' school at Clay-Ashland, under the Rev. J. Frith, a former professor in Liberia College, is doing as well as could be expected. During the year 1903 the school was transferred from Cape Mount. As yet suitable quarters on the new site have not been completed. For the year 1904 there were 27 boarding and 9 day scholars in the girls' department and 14 boarding and 22 day pupils in the boys'. Every effort is being made for suitable buildings in a more favorable locality. The examinations held in June last showed interest and progress.

XII. PROTESTANT EPISCOPAL PRIMARY SCHOOLS.

Besides the schools already given there are a number of parish schools maintained in connection with the Protestant Episcopal Church in Liberia, and which cluster about the several chief schools of the system. Following are some statistics of these schools taken from the Bishop's reports to the Protestant Episcopal Missionary Society for 1903 and 1904:

Statistics of Protestant Episcopal Schools in Liberia.

[D=Day; B=Boarding; N=Native; L=Liberian.]

Districts and stations.	1903.						1904.					
	Schools		Pupils.				Schools		Pupils.			
			Day.		Boarding				Day		Boarding.	
	D.	B.	N.	L.	N.	L.	D.	B.	N.	L.	N.	L.
MONTSERRADO COUNTY.												
Monrovia	1		21	24			1		31	18		
St. Augustine's	1	1	2	2	8	20	1	1	5	4	4	35
Clay-Ashland	2	2	3	20	19	25	2	2	32	41	25	16
Caldwell												
New York Settlement												
Crozierville							1			29		
Cape Mount	1	1	80		80			1			60	
BASSA COUNTY												
Buchanan	3		29	43			2		24	58		
Edina	2		21	23			1		19	27		
Tobacconee	1	1	30		26			1			26	
SINOE COUNTY												
Greenville	1		21	37			1		25	60		
MARYLAND COUNTY												
Harper	2	1	35	36	65	13	2	1	9	116	73	9
Hoffman	4	1	141	3	12		3	1	154		18	
Cavalla	2		30				2	1	40		6	
Rocktown	6	1	90		11		3	2	110	2	17	
Sodoke	4	4	66	11	37	6	2	4	60	1	30	
Garaway	4	3	56		38		2	3	44		42	
Cuttington	1	1	77	28	77	26	1	1	3		59	22
Cavalla River	4	2	72		13		3	5	36		35	
Total	38	18	783	227	386	94	27	23	601	354	453	82

[a] Report of the Missionary Society of the Protestant Episcopal Church, 1904, p. 148.

A slight examination of the foregoing table discloses that for the year 1903 the Protestant Episcopal Church in Liberia had a total of 56 schools with 1,490 scholars. There were 2 schools in Cape Mount, 7 in Montserrado County, 7 in Bassa, 1 in Sinoe, and 39 in Maryland County. A little more than 32 per cent of the total number of schools were boarding schools, and nearly 70 per cent were in Maryland County, while 73.5 per cent of all the scholars were native Africans. Thus the Protestant Episcopal Schools contained 23.5 per cent more native Africans in 1903 than the average estimate of the superintendent of the Methodist schools.

For the year 1904 the total number of Protestant Episcopal schools was 50, with a total of 1,490 scholars, a decline from the previous year of 6 schools, but with no loss of scholars. Continuing the comparison, there was a loss of 1 day school at Cape Mount, the gain of 1 day school in Montserrado County, the loss of 3 day schools at Bassa, and in Maryland County a loss of 8 day schools and a gain of 5 boarding schools. In other words, there was a decline of 10.7 per cent in the number of schools, a little more than 6 per cent in scholars, the native African sustaining 6.2 per cent loss and the Americo-Liberian 9.3 per cent.

In two material particulars, for some time past, the Protestant Episcopal schools have had the advantage of the Methodist schools. The first, and perhaps the most important, is in the matter of supervision. In West Africa this is very material. The difficulties and expense of travel discourage visits to various fields of the work. The natural effect of climatic conditions is to impair one's desire and ability for intellectual and physical labor. Everywhere there is a tendency to do as little as possible, and many neglect what they might just as well have done, on the theory that they are in the Tropics. The superintendent of the Methodist schools is also president of the College of West Africa. The efficient discharge of the duties of either position would justify the undivided attention of one man. On the other hand, the Protestant Episcopal schools have had the personal supervision of the bishop, residing in Liberia, and visiting the schools in connection with the church work in general, while the bishop of the Methodist Mission has visited Liberia only about once a year, and having so much other work in Africa, could not be expected to have made Methodist schools the visits which the bishop has been able to make to the Protestant Episcopal schools.

Moreover, the Liberian and the native African have few conveniences. The native African is poor because he does not understand how to enrich himself from the wealth of his surroundings. Both are therefore much impressed by the dignity of position and the power of wealth. One can imagine, then, the inspiration which the Protestant Episcopal schools have received from the presence of a resident bishop visiting from time to time in his private launch the various stations in his work. The election of a resident bishop for Liberia by the Methodist Episcopal Church will greatly strengthen the force and efficiency of the Methodist schools in Liberia.

The next advantage of the Protestant Episcopal schools in Liberia has been in the salary of the teachers. In the Methodist common schools a contribution of from $50 to $75 per annum is made to the teacher. In the Protestant Episcopal parish schools, the salaries of the teachers range from $150 to $300 per annum. The lowest amount received in the latter class of schools is at least twice the greatest amount received in the former. Very much more depends on the salaries paid to teachers in the public schools than is ordinarily supposed. Small salaries have a tendency to injure the service in which they are paid, and at times this tendency is strikingly manifested. They too often attract the incompetent, to whom a salary is a harmful charity. Low salaries repel the proficient teachers, who seek that employment which will sustain a living in accordance with their standards. So that the natural tendency of the superior salaries in the Protestant Episcopal schools has been much in their favor.

The President of the Republic, Arthur Barclay, who is a member of the Protestant Episcopal Church, in his inaugural address, January 1904, speaking of the Methodist Episcopal Church, had this to say:

I am glad to see that the Methodist Episcopal Church has resumed its missionary operations among the heathen tribes. Liberia is its oldest missionary field. The heathen tribes are almost untouched by Christian influences. The progress of the faith of Islam has been, I believe, exaggerated.

And the following of the Protestant Episcopal church:

The educative and religious work of the Protestant Episcopal mission in the county of Maryland has been of enormous political use to Liberia. I am afraid that our people have appreciated neither its value nor its significance. Its idea of rearing up a native pastorate, which has not been followed up lately, owing possibly to the unfortunate events of 1874, was a grand one. Let us hope that the work in that direction will be resumed and pressed. We were to blame for the troubles of 1875. The Republic has nowhere in the country more loyal and devoted citizens than among the Christian Greboes of the county of Maryland, and we must thank the Episcopal mission for it. It is helping us, too, by its work among the Vey tribe.

XIII. LIBERIAN PUBLIC EDUCATIONAL SYSTEM.

The Republic of Liberia has a bureau of education, in connection with which it maintains a complete system of public instruction. It is not our present purpose to trace the various evolutionary stages of this system from its birth, as a few salient facts in its history will serve us better. It is based upon the following legislation:

1. *An act providing for common schools.*

It is enacted by the Senate and House of Representatives of the Republic of Liberia in legislature assembled:

1. That there be established in each settlement and township in the several counties of this Republic at least one common school—said schools shall be under the entire control of the several school committees hereinafter ordained to be elected. The said committees shall make rules for the government of the same and are authorized and enjoined to employ a faithful and competent instructor for each school. Each teacher shall furnish the committee at the end of each term a full and detailed report of the state of the school—the studies prosecuted, the number, age, and sex of scholars, the time of entrance, and all such other matters as may be deemed important. All such reports shall be laid before the legislature.

2. That the annual sum of one thousand dollars be, and the same is hereby, appropriated to be drawn out of the treasuries of the several counties. Said sums shall be appointed [apportioned] among the several towns according to their number of inhabitants, to be applied exclusively to the support of the common schools of this Republic.

3. That the several towns and villages in their municipal capacity are authorized to levy an annual tax upon all male inhabitants over the age of twenty-one years—and the amounts so raised shall be applied as directed in the second section of this act. The several school committees are hereby authorized to draw quarterly for the amounts due to the schools of which they may have the supervision: *Provided, however,* That in no case shall any one teacher receive more than four hundred dollars a year.

2. *An act creating an interior department.*

It is enacted by the Senate and House of Representatives of the Republic of Liberia in legislature assembled:

SECTION 1. That from and after the passage of this act there shall be created a new executive department of the Government of the Republic of Liberia to be called the department of the interior, the head of which department shall be called the secretary of the interior, who shall be appointed by the President of the Republic of Liberia, by and with the advice of the Senate, and who shall hold his office by the same tenure, and receive such salary as may be determined by law, and who shall perform all the duties assigned to him by this act, and who shall appoint a clerk of his department.

SEC. 2. And it is further enacted, that the secretary of the interior shall exercise and perform all the acts of supervision and appeal in regard to patents now exercised, according to law, by the secretary of state.

He, the said secretary of interior, shall exercise the authority of supervision and appeal over all land commissioners, over all marshals, clerks, and other officers of the court, over all native commissioners, over all commissioners of public buildings, over all discoveries of metals and minerals or other articles of value on the domain of the Republic of Liberia.

SEC. 3. It is further enacted, that the secretary of the interior shall have committed to him, subject to the direction of the President—

1. The educational interests of this Republic.

2. The extension of the laws of this Government to the aboriginal citizens of the same.

3. All correspondence and negotiating of treaties and alliances with native kings and chiefs beyond the jurisdiction of this Government.

4. The advancement of the operations of agriculturists by contracting, when necessary, for a supply of laborers on such plans as he shall devise and procure them and have them employed with humanly and justly, and fairly paid [sic].

5. The improvement and regulation of cities and towns of this Republic. He, the said secretary of interior, shall also have, subject to the President, authority to assess additional taxes in the cities and towns of this Republic for the maintenance of the schools of the same which additional tax shall be exclusively for the school of the city or town in which the assessment is made.

6. He shall cause this additional tax to be deposited in the treasury or subtreasuries of the Republic, and he shall draw upon the secretary of the treasury for such portions of the school fund as the secretary of the treasury shall be at liberty by the warrant of the Persident, to draw from the treasury or subtreasuries of this Republic.

7. He, the said secretary of the interior, shall cause this provision for an additional tax to extend to the aboriginal citizens of this Government.

8. He shall direct the native commissioners of the counties and require a quarterly report of their doings.

SEC. 4. And it is further enacted, that the said secretary of the interior shall procure and introduce into this Republic the most approved and efficient educational system subject to such mendatories [sic] as the circumstances of the country may require or the progress of the age shall demand.

SEC. 5. It is further enacted, that the educational system of this Republic shall be compulsory upon every parent, guardian, or citizen having in his legitimate control any child or children, apprentice or apprentices, male or female, of the age of eight years and not over sixteen years. And the said parent, guardian, or citizen having a child or children, apprentice or apprentices lawfully in his or her possession, shall be, and is hereby required to send him, her, or them to the public school or some other school, where the subjects of a good English education are taught, three days in a week excepting vacations and Saturdays unless some unavoidable circumstance shall prevent, which shall be made known to the teacher to be regularly recorded in the journal of the school.

SEC. 6. It is further enacted, that any parent or guardian, male or female, possessed of a child or children, apprentice or apprentices as aforesaid, violating the provisions of this act by unnecessarily neglecting to send him, her, or them to school as aforesaid, shall be fined in a sum not less than fifty cents nor more than one dollar for each neglect.

SEC. 7. It is further enacted, that the secretary of the interior shall appoint, with the approval of the President, two school commissioners in each county, whose duty it shall be to examine all applicants to teach in the public schools in their respective counties in the branches of an English education and certify their competency to the secretary of the interior with their recommendation for employment. Said school commissioners shall examine the schools of their respective counties quarterly and make requisitions upon the secretary of the interior for suitable books and facilities for their different operations. They shall aiso report quarterly to the secretary of the interior the condition and all the particulars of their schools. They shall likewise, without partiality, recommend the discharge of immoral, incompetent, delinquent, or indolent teachers. They shall, upon information given them by the teacher, who, or his school journal, shall be evidence in the case, prosecute before any justice of the peace for every violation or violations of the provisions of this act, and said justice of the peace shall be compelled to hear the said evidence of the defense and to acquit at the expense of the losing party, or to give judgment in favor of the school commissioners in a sum agreeable with the provisions of this act.

SEC. 8. It is further enacted, that all fines imposed by a justice of the peace for infraction of a provision of this act shall be obtained, if not paid, by a writ of execution lawfully granted by said justice of the peace.

SEC. 9. It is further enacted, that all fines for violating a provision of this act and all taxes levied to make up the deficiency of an allowance for a school shall be paid into the treasury or subtreasury by the collectors of the same, who shall obtain from the treasurer or subtreasurer of their respective counties a duplicate receipt, the primary receipt to be remitted to the secretary of the interior immediately by the said collector or collectors to be by him indorsed and turned over to the secretary of the treasury upon his acknowledgment in writing. Every constable or tax collector employed in collecting the fines and taxes of the school fund shall pay into the treasury or subtreasuries the fines or taxes collected by him within three days after they have been collected by him or be held to have forfeited his bond, for which he may be prosecuted by the school commissioner before any court of competent jurisdiction in their respective counties, and the expense or costs of such suits shall be borne by the defense.

SEC. 10. It is further enacted, that it shall be lawful for the secretary of the interior to levy an additional tax upon the citizens and inhabitants of any school district when he finds the school funds inadequate to sustain the educational interest of the same. But no such tax shall be levied but by an assessment by three competent citizens of a rate percentage on the assessed property of the school *district sufficient to make up the* deficiency. The assessors of this extra tax shall be sworn to do their *duty faithfully and to the best of* their ability. They shall receive the pay of the regular assessors.

SEC. 11. It is further enacted, that school districts shall be marked out by the secretary of the interior amongst the aboriginal citizens living within them and within the school districts of civilized settlements shall be subject to this act without partiality [sic].

SEC. 12. It is further enacted, that the treasurer and subtreasurers shall keep a separate account of the school fund and report the same quarterly to the secretary of the treasury.

SEC. 13. It is further enacted, that the secretary of the interior shall adopt in the payment of the salaries of the teachers a scale, of which eight dollars shall be the minimum and twelve dollars the maximum for each pupil taught annually. He shall possess authority to determine the number of scholars of each school.

SEC. 14. It is further enacted, that from and after the passage of this act half of the amount of taxes on real property, half of the amount of the poll or head tax, all the taxes on distilleries and spirits of each city or town shall be credited invariably to the school fund of this Republic. The pay of the secretary of the interior shall be $600.

SEC. 15. It is further enacted, that the pay of the school commissioners shall be $300 and they shall be bound for the faithful discharge of their duty.

SEC. 16. It is further enacted, that the secretary of the interior or commissioner of education shall sign all requisitions for the advance or payment of money out of the treasury appropriated by the legislature for account of which they are constituted the supervisor.

SEC. 17. And it is further enacted, that nothing in this act shall be so construed as to affect or impair any powers conferred or duties devolved on the secretary of the treasury in relation to the transfer, safekeeping, or disbursement of the public moneys by the act creating a treasury department except that school funds shall only be drawn by the officers herein named. Nothing in this act shall be so construed as to conflict with an act establishing schools among the aboriginal inhabitants of this country [or] the mode of collecting tax.

SEC. 18. And it is further enacted, that any law or parts of law conflicting with the provisions of this act are hereby repealed.

Approved, January 23, 1869.

Act 3.

Whereas the condition of the aboriginal inhabitants of this Republic calls loudly for this Government to put forth some effort tending to their civilization; and whereas it should be the special desire of this Government to educate and incorporate them in our midst, so as they may aid in the upbuilding of this negro nationality. And as the collection of an annual tax from the aborigines for the support of common schools among them is obvious: Therefore—

It is resolved by the Senate and House of Representatives of the Republic of Liberia in legislature assembled:

SECTION 1. That there shall be appointed, after the usual way of official appointments by the President, a learned and discreet person in each county to be styled commissioner of education, who shall have the general supervision of all public schools in said county, unto whom quarterly reports shall be made by all teachers of public schools, embracing the condition or wants of said schools, the number of pupils, their branches of study, their names, the time of their entry, their age, and whether they are aborigines or Americo-Liberians; the said commissioner of education shall visit the public schools of the respective counties in person four times during each year, direct and examine all teachers, and give their particular attention to the cause of education in said counties: they may solicit from abroad suitable schoolbooks for the use of said schools, and they shall make a semiannual report of the condition of said schools to the secretary of the interior, who shall make known to the legislature annually the progress of education in this Republic.

SEC. 2 It is further enacted, that the commissioner of education shall see that all school-teachers discharge faithfully their duty as such, and shall institute rules for the government of all public schools, and on failure of any teacher or teachers to discharge his or their duty, or for other sufficient cause, the said commissioner shall discharge such teacher or teachers, subject to the approval of the secretary of the interior, and appoint others.

The secretary of the interior and the commissioner of education may be discharged from office for sufficient cause by the President or legislature of this Republic, which removal may be at any time. But on the commissioner of education falling to report to the secretary of the interior, as herein directed, it will be the duty of the secretary of the interior not to draw orders in his favor in payment for his services unless it be made to appear that circumstances beyond his control prevented him from making said report; the said report shall be made, however, before payment is made. The salary of the commissioner of education shall be three hundred dollars annually until otherwise appropriated, which may be drawn quarterly. And whenever the financial state of this Republic will justify, by consent of the secretary of the interior the commissioner of education may establish high schools in the several counties of this Republic and recommend the appointment of suitable teachers of said high school to the secretary of the interior, who shall appoint the same, subject to the approval of the Senate.

SEC. 3. It is further enacted, that there shall be paid by each native aboriginal inhabitant of this Republic, twenty-one years of age and over, as far back interiorward and coastwise as the President may deem prudent to enforce this act, the sum of one dollar annually, as a tax fee for the educational improvement of the aboriginal population of this Republic.

SEC. 4. It is further enacted, that in order to carry out the provisions of this act, the President is hereby directed to appoint each native chief or headman as may be recommended by the commissioner for aborigines as assistant collectors of said taxes, which taxes shall be paid in demand notes, palm oil, camwood, or other available produce at native prices, and commissioners for aborigines in the several counties shall be associated with said native chiefs or headmen, as collector of said taxes, in no case exacting of anyone not probably twenty-one years of age or over. Said commissioner shall give bond and security for the faithful discharge of his duty to the amount of two thousand dollars, and for his services his pay as commissioner shall be regulated by the act creating commissioners for aborigines.

SEC. 5. And it is further enacted, that out of the taxes thus collected the native chief or headman engaged in collecting the same shall be entitled, as soon as the collection is over with his tribe, to one-sixth out of all taxes thus collected, which shall, under the commissioner of education, be converted into the best merchandise and given to said chief or headman for his own use and benefit.

SEC. 6. And it is further enacted, that the taxes thus collected shall be placed for safe-keeping in the possession of the treasurer, who may change the same for available money, such as specie, drafts, or greenbacks, or other demand notes styled the currency of this Republic, and the same separately kept from all other moneys in his charge, and in no case shall he pay out any of said money, except by legislative appropriation; he shall, as well as the commissioner, chiefs, or headmen, make quarterly report of all moneys, oil, or camwood thus collected or secured to the secretary of the interior, who shall report the same to the legislature at its ensuing session. In the leeward counties said reports shall be made to the comissioner of education, who shall forward the same to the secretary of the interior.

SEC. 7. It is further enacted, that the moneys thus collected from the natives shall be used for maintaining common schools among them at convenient places and also toward the payment of the commissioner of education. The teachers of public schools shall be appointed by the commissioner of their respective counties.

SEC. 8. And it is further enacted, that the native chiefs or headmen who comply with the provisions of this act shall be commissioned by the President as justices of the peace, who shall be associated with the commissioner for aborigines in the settlement of petty offenses within the jurisdiction of his or their county; they may impose fines, and in fact may try cases of debt where the amount does not exceed two hundred kroos, and do all that a magistrates' court may do otherwise.

SEC. 9. And it is further enacted, that every chief or headman and his or their tribe [who] comply with the provisions of this act shall have the fullest protection of Government against any tribe in hostility against him or them, and for their relief the President may at any time when the occasion requires enroll a posse of men, uniting them with said chief or headman and tribe, for the purpose of chastising any hostile tribe herein contemplated, and they shall have the same pay and support given to the militia in actual service as provided for otherwise by law.

SEC. 10. And it is further enacted, that said chiefs or headmen may hold meetings of his or their tribe at the close of each year, and may petition the legislature, making known any of their grievances, and the same may be handed to any senator or representative, who shall lay the same before the legislature at the ensuing session.

SEC. 11. And it is further enacted, that the President shall cause to be registered the name of every native living in the towns contiguous to each city or town of the Republic, by the commissioner of aborigines, on his first visit, which shall be during the month of March, 1869, the said register shall be lodged with the secretary of the interior or superintendent of the several counties. The pay of school-teachers shall be regulated in the annual appropriation bill by the legislature, and the pay of each school-teacher shall not exceed three hundred dollars per annum.

SEC. 12. It is further enacted, that any native chief or headman obstinately and persistently refusing to comply with the provisions of this act shall not be allowed a hearing before the President nor at the superintendent's department, nor shall they in any way be entitled to Government protection except for manifest injustice.

SEC. 13. It is further enacted, that in order to propagate the palm tree in this Republic, it shall be required of every native chief or headman complying with the provisions of this act, as well as Americo-Liberian citizens, to plant, [or] to cause to be planted, in every new farm cultivated by them on the public lands (not abounding in palm trees) palm nuts or palm seeds all over said farms at suitable distances in payment for the use of the public lands, and by so doing they shall have Government protection for the crops cultivated on the same.

SEC. 14. And it is further enacted that no school-teacher among the natives shall be allowed to trade with said native tribe where he is appointed as teacher, except for food for his maintenance, but shall devote his time to their elevation and civilization.

SEC. 15. It is further enacted that all laws or parts of laws conflicting with the provisions of this act be, and the same are hereby, repealed.[a]

Approved January 23rd, 1869.

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[a] Statute laws of Liberia, 1848–1874, pp. 166, 12, and 35.

Act 4.

Resolution providing for the appointment of a general superintendent of public instruction and common schools and for other purposes.

It is resolved by the Senate and House of Representatives of the Republic of Liberia in legislature assembled:

SECTION 1. That the President be, and is hereby, directed to appoint, immediately after the passage of this resolution, an officer to be styled general superintendent of public instruction and common schools; said officer shall superintend the operation of public and private schools, and see that the school laws are enforced.

He shall issue to the commissioners of education circular letters of instructions and suggestions; he shall collect information concerning the condition and operations of common schools in the different counties and districts; and digest and report upon the same, together with suggestions and recommendations, annually to the legislature; and he shall visit all the schools in each of the counties at least twice a year; and he shall require all the school commissioners to visit the schools in each county at least once a quarter and report their visitation in their quarterly reports.

SEC. 2. It is further resolved that the commissioners of education shall make their quarterly reports to the said superintendent, and shall be subject to his instructions and directions.

The superintendent of education shall always prepare and send in writing, with his report, all bills relative to the educational interest of the country, whose passage he may recommend.

His salary shall be seven hundred ($700) dollars yearly with travelling expenses.

Any law to the contrary notwithstanding.[a]

Approved January 26, 1900.

The common schools of Liberia were established by the first act and grew up under the second and third. Under the supervision of the commissioner of education and the school committee the schools had so increased from 1869 to 1900 that the fourth act was passed creating a bureau of education with a general superintendent of public instruction. These four acts set forth clearly the duties of the teachers, school committees, commissioners, and superintendent of public instruction, which need not be repeated.

Rules for teachers.

In 1901 the first superintendent of public instruction, J. C. Stevens, published for the guidance and help of teachers some rules and regulations. A few of them may be of interest:

1. The school is to be taught four days in each week, and five hours each day.

2. The following will be a good form of opening exercises: (1) Singing; (2) reading a chapter, a psalm, or a part of one, from the Bible; (3) the Lord's Prayer; (4) singing; (5) roll call. The exercises may vary, but should never take more than half an hour. Fifteen or twenty minutes might be sufficient time.

3. Sectarianism and politics are not to be taught in school. Therefore, teachers should avoid commenting on the Scriptures, as well as partisan politics. Teachers are not employed to preach or make political speeches.

All the people have the right to send their children to the public school without having their religious or political opinions tampered with by the teacher.

4. It is expected that the teacher in his conduct will be a good moral example to his school.

5. The ancient and erroneous practice of keeping beginners spelling a long time before commencing to read is to be abolished and instead the primer, or first reader, and slate are to be used from the start.

6. All teachers employed in public schools shall be annually examined in the branches to be taught in the schools, and receive at each examination a teacher's certificate, which shall be good for one year.

Teachers shall be divided into three grades: Those who pass a satisfactory examination in reading, spelling, writing, arithmetic as far as and including long division, and marking and keeping roll book shall receive a third-grade certificate. Those going further, who shall evince a sufficient knowledge of arithmetic through fractions, primary geography, grammar through parts of speech, shall receive a second-grade certificate; those who still further understand arithmetic through percentage, grammar through syntax, and have a fair knowledge of general history and the history of Liberia and geography, shall receive a first-grade certificate.

The standard of excellence will be gradually raised annually.

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[a] Public school law of Liberia, 1901, by Superintendent J. C. Stevens.

In all grades professional experience shall be counted in the applicant's favor. In grading or making certificates 100 shall be the standard.

7. Applicants of good moral character will be examined and employed as teachers, without regard to religious sect, political affinity, or sex.

8. Teachers of the higher grade shall always be preferred, other things being equal.

9. The annual examination shall be held on the first Tuesday, Wednesday, and Thursday in February, in Montserrado County; the second Tuesday and Wednesday in December, in Grand Bassa; the third Tuesday and Wednesday in November, in Sinoe County; and on the first Tuesday and Wednesday in November in Maryland County. Should the commissioners in the leeward counties find it to be necessary and expedient, three days may be used.

10. The teacher shall each day hear recitations in every study of each class. History and geography may be alternated— or taught twice a week. A lesson in the rudiments of music once a week is desirable where possible.

11. Whenever it is impossible for the general superintendent to be present at the examination of teachers, the commissioner of education will associate with himself one person of the county, male or female, distinguished for educational ability, and of unbiased mind, to assist him in grading the teachers according to merit evinced in the examination, in order to avoid the charge of partiality.

12. The salary of teachers will be fixed according to their grade, the first grade receiving the highest and the third grade the lowest sum. Until otherwise ordered, second-grade teachers shall receive $30 a year more than third-grade teachers, and first-grade $30 more than the second-grade teachers.

13. Any teacher examined and graded by the commissioner alone, feeling that he has not received justice in such marking, may appeal to the general superintendent, and appear before him for further examination, at a stated time, at his own expense.

14. While corporal punishment is allowed, yet it should be the last resort. All means of moral suasion must be exhausted before the rod is taken; and then should be used in moderation, according to the principles of the common law. The ablest teachers use the whip the least.

15. Corporal punishment should not be administered for mere failure to know lessons, but for persistent idleness and mischief making it may be given moderately.

16. Vacations shall be from the 30th day of November to the second Monday in February, and from the 15th of July to the 15th of August.

Statistics of the public schools of Liberia.

[From Superintendent's Report, 1903.]

County.	Pupils.				Schools.	Teachers.
	Liberian.		Native.	Total.		
	Male.	Female.				
Montserrado	860	422	302	1,584	53	53
Bassa	229	150	111	490	13	13
Sinoe	265	145	195	605	15	15
Maryland	227	120	195	542	19	19
Total	1,581	837	803	3,221	100	100

From the superintendent's report to the legislature in 1903 I have been able to secure the few figures here given, which will throw some light upon the common schools maintained by Liberia. For that year there were 100 distinctively Liberian common schools, with 3,221 scholars under 100 teachers. There were 837 Liberian females in school, or 34.6 per cent of all the Americo-Liberians in the strictly Liberian schools. No distinction was made regarding the sex of the native Liberians, of whom there were, male and female, 803, or 24.9 per cent of the public common school pupils.

XIV. INFLUENCE OF COMMON SCHOOLS IN LIBERIA ON THE AFRICAN.

For the year 1903 in Liberia 50 per cent of the scholars in the Methodist schools were native Africans; 73.5 per cent of those in the Protestant Episcopal schools; 24.9 per cent of those in the public schools; making 42.6 per cent of the entire primary school enrollment in Liberia. Thus a little less than half of the children in school in Liberia in 1903 were native Africans. The Republic of Liberia was educating 337 *more native children* than the Methodists and 376 less than the Episcopalians.

Statistics of common schools since 1900.

OCTOBER 1, 1900, TO SEPTEMBER 30, 1901.

County.	School support.	Books.	Totals.
Montserrado	$8,000	$500	$8,500
Bassa	3,000	200	3,200
Sinoe	3,500	250	3,750
Maryland	2,500	200	2,700
Cape Mount	500	.....	500
Total	17,500	1,150	18,650

OCTOBER 1, 1901, TO SEPTEMBER 30, 1902.

Montserrado	$9,500	$1,000	$10,500
Bassa	3,000	200	3,200
Sinoe	3,500	250	3,750
Maryland	3,200	200	3,400
Cape Mount	900	.....	900
Total	20,100	1,650	21,750

OCTOBER 1, 1902, TO SEPTEMBER 30, 1903.

Montserrado	$9,500	$500	$10,000
Bassa	5,000	.....	5,000
Sinoe	3,500	250	3,750
Maryland	4,200	200	4,400
Cape Mount	900	.....	900
Total	23,100	950	24,050

OCTOBER 1, 1903, TO SEPTEMBER 30, 1904.

Montserrado	$9,000	$500	$9,500
Bassa	5,000	.....	5,000
Sinoe	3,500	250	3,750
Maryland	4,600	200	4,800
Cape Mount	900	100	1,000
Total	23,200	1,050	24,250
Grand total	83,900	4,800	88,700

XV. SUPPORT OF COMMON SCHOOLS IN THE LIBERIAN SYSTEM.

Although the legislature provided for the support of schools by taxing all males over 21 years of age, by allowing half of the tax on real estate for the school fund and all the tax on spirits and distilleries, yet the method provided did not work well, and the legislature appropriated the support of the common schools from the general treasury of the Republic. In the previous table I have been able to give, through the courtesy of Hon. Daniel Howard, secretary of the treasury, the appropriations for the common schools of the Liberian system since the organization of the bureau of education in 1900.

It is to the credit of Liberia that for these four years for her common schools she spent $83,900 for their general support and $4,800 for books, a total of $88,700. And taking the enrollment for 1903, exclusive of Liberia College, the Republic spent $7.17 per child for its education.

XVI. HIGHER EDUCATION IN LIBERIA—LIBERIA COLLEGE.

The great national institution in Liberia for higher learning is Liberia College. It is the pride of the Liberians and commands the patriotic support of the country. Dr. R. B. Richardson is its honored president. For the year ending December 9,

1904, it had in the college department 13 freshmen, 5 male and 8 female; 9 sophomores, all male; 13 juniors, 6 male and 7 females, and 5 seniors. It is managed by two boards of trustees, one in Liberia and one in the United States of America. It has four departments—preparatory, law, industrial, and collegiate. It has 12 professors and instructors, with a total of 120 students. There is a separate building for the female students, so that there is no higher coeducation of the sexes in Liberia College.

Some time in 1848 Rev. John Payne, a missionary of the Protestant Episcopal Church at Cape Palmas, wrote to the Hon. Simon Greenleaf, an eminent jurist of Boston, Mass., for aid in establishing a theological school at Cape Palmas. Believing that Liberia needed an institution for liberal culture, Mr. Greenleaf brought the matter to the attention of the Massachusetts Colonization Society in 1849. The final result was the founding of Liberia College under the control of two boards of trustees, one incorporated in 1850 in Massachusetts under the title "The Trustees of Donation for Education in Liberia," and the other in 1851 at the incorporation of Liberia College by the Liberian legislature.[a]

The college building cost $20,000, which was given by the Boston board. Liberia gave "the 20 acres on which the college stands and 1,000 acres of land in each of the four counties in Liberia."[b] The first act of incorporation designated Clay-Ashland as the proposed site. In the matter of a site several suits were filed, with the result that the college was located at Monrovia.

Liberia College was opened in 1862 with a president, 2 professors, and 8 students, with 8 more in preparation. The sources of its support until about 1890 were mainly the funds raised by the Boston board. The two boards did not work together in perfect harmony, and the college department of Liberia College was suspended several times prior to 1890. In 1881–82 the Liberian legislature provided for the establishment of a preparatory school in each of the four counties. About 1890 the Republic assumed the responsibility of supporting the college principally, and since that time it has only closed once, which was about 1893, on account of the Cape Palmas war.

Support of Liberia College since 1900.

Dates.	Amount.
October 1, 1900, to September 30, 1901	$23,448.11
October 1, 1901, to September 30, 1902	28,812.74
October 1, 1902, to September 30, 1903	29,467.30
October 1, 1903, to September 30, 1904	15,460.33
Total	97,188.48

In 1898, when W. D. Coleman was elected president, efforts began for the reopening of Liberia College. He induced the legislature to pass an act providing that one-half of the duty on piassava, one-half of the proceeds of the sales of public lands, and all escheated property be set apart as an endowment fund for the support of Liberia College. Rev. G. W. Gibson, who afterwards became president of the Republic, was elected president of Liberia College in 1900. At Doctor Gibson's inauguration the Rev. E. W. Bylden made an able and scholarly address on "The Liberian Scholar."

Since 1900, exclusive of American aid, Liberia has raised for the support of Liberia College from piassava alone $97,188.47. The smallest amount from this source was in 1904, $15,460.33, which is $128.83 per student.

Scholarships.—One of the best things done by Liberia on the reopening of Liberia College was the establishment of scholarships to perpetuate the names of those rendering distinguished services to the college and the Republic. Among the number

[a] African Repository, vols. 39-41, p. 193. Address of Dr. G. W. Gibson in 1900 on the occasion of his Inauguration as President, p. 25.

[b] African Repository, vols. 39-41, p. 88.

is the "Gordon Memorial Scholarship," in memory of the English lieutenant who in 1822 sacrificed his life for the colony. There is one to the memory of Hon. John Payne, who first formulated the idea resulting in the college; one named after the distinguished jurist Hon. Simon Greenleaf, who led in the consummation of the idea, and still another after Hon. George Briggs, who labored with him. Senator Alfred B. King proposed one to Rev. John B. Pinney, who gave for the settlement of the colony the best years of his long and eventful life. It is impossible to give all the great names associated with Liberia College or to recall all her eminent sons who have distinguished themselves in the highest services of the church and state. It has had among its presidents the Hon. J. J. Roberts, the first President of Liberia; the Rev. E. W. Blyden, the African scholar; the Rev. G. W. Gibson, ex-President of Liberia, and Dr. R. B. Richardson, its present President. Among its distinguished graduates are the Hon. J. E. Moore, ex-secretary of state; Senator A. B. King, the first orator of Liberia; the Hon. T. W. Haynes, ex-attorney-general; Dr. R. B. Richardson, president of Liberia College, and the Hon. Arthur Barclay, President of Liberia. The institution has rendered to the Republic the most valuable services and is destined to render still more in the future.

XVII. OTHER SCHOOLS IN LIBERIA.

Presbyterian schools.—The writer is reliably informed that at one time the Presbyterians maintained in Liberia a class of schools which exercised a very wholesome influence upon the educational life of the Republic. Among their chief schools was the Alexander High School located at Monrovia, and afterwards transferred to Clay-Ashland. At the present time they have no schools in Liberia.

Baptist schools.—At this writing the Baptists in Liberia have only three schools, and Hon. D. E. Howard, secretary of the treasury, states that one of them is now supported by the general public, although the Baptists are in the majority and control its management. They have a parish school at Edina, and Reeves Institute at Fortsville, Bassa County, the latter being partly supported by the public. The work done is similar to that done in the high schools of Liberia. In connection with the institute there is a military department. They also have another school, Rick's Institute, at Kia-Poo, Montserrado County. This institute has not been in operation for the past two or three years, but arrangements were made for reopening it at the last session of the Liberia Baptist Missionary and Educational Convention.

African Methodist schools.—The African Methodists have no schools at present in Liberia. Through the efforts of the Rev. Dr. L. C. Curtis, an industrial school has been built at Arthington, on the St. Paul River, and will be opened soon.

Lutheran schools.—The Lutheran Church has some schools in Liberia. They are confined to Montserrado County and are in the Muhlenburg Mission work. The writer has been unable to get such a report as he desired, but it is known that they have 6 schools, 11 teachers, and 144 pupils. The work is entirely among the native Africans. The mission is about 45 miles in the interior. The schools are exercising a wholesome influence, as parents still farther in the interior have children there.

XVIII. INDUSTRIAL EDUCATION IN LIBERIA.

Liberia is joining other nations in the recognition of industrial training. Industrial education was no doubt first introduced in Liberia through the mission schools. In some of the Methodist schools an opportunity is given for industrial training, namely, in the White Plains Industrial School, the Sinoe River Industrial Mission, and the College of West Africa. In the White Plains School, during the time of Superintendent John Seys, there was a sawmill from which lumber was supplied to the colonists; and enough sugar was produced not only to meet the demands of home consumption, but much was exported to the United States during the civil war and later. Now the students are taught building, woodwork, masonry, brickmaking, farming, and the cultivation of cotton, ginger, and rubber.

At the Sinoe Industrial Mission training is given in carpentry, building, and farming, very much the same as at White Plains. In connection with the College of West Africa there is a printing department, under the management of Mr. F. M. Allen, in which printing is taught. The success of this department is attested by the excellent job work done, and the work on the "Liberia and West Africa" and other papers printed in the office. Most of the work is done by native Africans. In the college proper the girls are trained also in domestic economy, housekeeping, dressmaking, fancywork, and kindred arts, under the supervision of Mrs. M. A. Camphor. Under Prof. W. F. Hawkins, the acting president of the college, the general work of the school for 1904 has been most satisfactory.

In the Protestant Episcopal schools industrial training is given at the four chief centers of education. At Epiphany Hall education is given in farming, including the cultivation of coffee, cotton, and rubber. During the five years just closed under Prof. P. O. Gray, great progress was made in the industrial department. Students were given an opportunity to learn printing and the carpenter's trade, and by rice cultivation the consumption of foreign-bought rice was reduced from 40 to 45 bags per month to 22 bags, and the coffee farm was made to yield from 3,000 to 4,000 pounds per annum.[a] There is, at St John's School, Cape Mount, an agricultural department, in which rice is raised with success, and efforts are being made to secure facilities for teaching other industrial arts. In connection with the Girl's School at Mount Vaughan, and the one at Clay-Ashland, the students are given "an ordinary education together with those arts essential to good housekeeping." The Right Rev. Bishop S. D. Ferguson, speaking of the former, said: "In this manual labor work, as well as in the art of needlework, there was much to be proud of and which reflected much credit upon the teacher."[b]

As far as the writer has been able to ascertain there is not as yet much industrial training given in the purely Liberian schools. At Rick's Institute, at Kai-Poo, the work consists chiefly of the cultivation of coffee, which has not been permitted to decline, and the farm yielded 3,000 pounds in 1902, 1,600 in 1903, and 1,400 in 1904. A most excellent printing department has been fitted up at Liberia College, and other industrial work is to be introduced later.

XIX. LIBERIA A NEW COUNTRY.

In all new countries the paramount question is the development of their natural resources. This can only be done by industrial education for the youth of the country, or by the immigration of those already skilled in the mechanical arts. The phenomenal growth of the United States owes much to the skilled workmen who, having served their apprenticeship in Europe, came to America and entered upon the conquest of a mighty continent. It is a matter of the first concern that the resources of a new country be explored or they can never be utilized for the comfort and happiness of its citizens. It is the industrially trained who discover the wealth of mine and wood, and who compel nature to yield to man the varied treasures of her riches.

Liberia is a new and undeveloped country. Its resources are not only untouched but unknown. It has about 1,475,000 native Africans, divided among the Kroo, Grebo, Bassa, Pessey, Bundie, Balie, Golah, Cossa, Vey, Mandingo, and other tribes. Some of these tribes have men possessed of great knowledge concerning the medicinal qualities of plants, herbs, and roots. The industrial products of the Mandingoes represent a varied use of natural resources and indicate a high order of industrial skill. A slight acquaintance with their capacities creates a strong temptation to enter upon a description of their industrial arts. I have been able to secure many products of them, to add to the collection at the National Museum in Washington, from the simplest article of decoration and dress to the most useful in industrial and domestic

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[a] *Retiring address of Prof. P. O. Gray, 1904.* [b] Report for 1904.

work. With industrial training all of these tribes, possessing different degrees of natural capacity, might be led in a successful conquest of Liberian territory, resulting in a financial independence of the Republic which can be secured in no other way.

XX. THE FUTURE OF LIBERIA.

That progress is most permanent which has the strongest economic root. It is because Dr. Booker Washington understands so well the philosophy of economic equipment and industrial life that he is performing a service to the American negro and the nation that ranks him among the great men of any age. The future of Liberia is indissolubly bound up with the industrial differentiation and development of her native population. The story of the courage, suffering, sacrifice, and death displayed in the planting of Liberia in West Africa is one of the most interesting chapters in the birth and growth of States. The assimilation of native Africans numbering sixty times the population of Americo-Liberians is the greatest problem of Liberian civilization. Every effort is being put forth by the present administration to secure the cooperation of the tribes for the development of the interior and the achievement of a common destiny. The magnitude of the task is great. But with the lapse of years more and more each generation will appreciate the importance of these native peoples. Assimilation is slowly taking place, and if Liberia is left unimpaired by the ambitions of designing States her influence for the civilization of Africans in Africa can not be measured now.

CHAPTER VIII.

AN ACCOUNT OF THE PROCEEDINGS OF THE INTERNATIONAL CONGRESS FOR THE REPRODUCTION OF MANUSCRIPTS, LIEGE, AUGUST 21–23, 1905.

By Charles Mills Gayley,

United States Delegate to the Congress.

I.

In the earlier part of the year 1905 the Belgian Government, through its minister of the interior and of public instruction, M. Jules de Trooz, invited the governments and libraries of the world to participate in a congress for the reproduction of manuscripts, coins, and seals, to meet in Liege August 21 to 23 of that year.

This initiative was taken as a consequence of a series of efforts long making for the preservation of historical, philological, scientific, and artistic monuments against the perils of decay, mutilation, theft, and fires, by reproducing them and manifolding them in facsimile. Not only, it was urged, would such provision avert the further destruction of the materials of scholarship, as by the recent conflagration at Turin, but it would facilitate the pursuit of original research for countries and students far removed from the few great depositaries of these sources of human knowledge. The following account of the congress will deal specially with the reproduction of manuscripts.

The United States of America appointed as its delegates to the congress President Angell, of Michigan; Dr. Herbert Putnam, the Librarian of Congress; Dr. J. S. Billings, director of the New York Public Library; Prof. Morris Hickey Morgan, of Harvard, and Prof. Charles Mills Gayley, of the University of California.

The congress was placed under the patronage of M. de Trooz and of M. Gustave Francotte, the Belgian minister of industry and labor. Its announced aims were two: First, to study all questions of theory and technic bearing upon the reproduction of manuscripts, coins, and seals; second, to effect an international understanding for the practical realization of the resolutions of the congress.

The congress was held in the deliberative chamber of the provincial council of Liege.

The proceedings were opened at 4.30 on August 21 by the report of the secretary of the Belgian committee of organization, the well-known Bollandist, Father van den Gheyn, keeper of manuscripts in the Royal Library of Brussels, on the course of the present movement and its importance for the scholarship of the future. The minister of instruction was represented by a letter, which outlined with no slight tact the courses and ideals open to the congress; and the reading of this was followed by an address of welcome from the genial and beloved president of the organizing committee, Professor Kurth, of the University of Liege.

The roll call disclosed the presence of some 80 delegates, some representing libraries and some governments.

Among the delegates were MM. Van der Haegen (chief librarian of the University of Ghent) and H. Hymans (director of the Bibliothèque Royale of Brussels), honorary presidents; Comte Thierry de Limburg-Stirum, Pirenne, and Gaillard, vice-presidents: Bayot, Stainier, and Tourneur, assistant secretaries of the organizing committee: the delegates of governments—Doctor Brambach for the Grand Duchy of Baden; G. Leidinger for Bavaria; Lange and Thiset for Denmark; Gayley for the United States of America and the American Library Association; Marcel, administrator-general of the Bibliothèque Nationale, Paris, and Omont, keeper of manuscripts in the same library, for France; Feyerpataky for Hungary; Gillon for Italy; Carlier for Portugal; Dom U. Berlière for the Vatican; Loriquet for the city of Rouen, and Dognée for the Royal Historical Academy of Madrid; as well as representatives from Germany, Holland, Sweden, Switzerland, Roumania, and Russia. Also present were noticeable Bergmans, of the University of Ghent; Chanoine Cauchie, the distinguished professor of ecclesiastical history at the University of Louvain; Émile Chatelain, member of the French Institute and director of the library of the Sorbonne; Barons J. de Bethune and de Chestret de Haneffe; Viscomte de Ghellinck-Vaernewyck; Mgr. Stan. le Grelle, of the Vatican Library; Fayen, of the Belgian Institute of History in Rome; Longuet, of Paris; Lundstedt, keeper of the Royal Library of Stockholm; Dom Germain Morin, of the Abbey of Maredsous; Prof. Maurice Prou, of the École Nationale de Chartes, Paris; Sury, of the University Library at Brussels; Van de Casteele, keeper of State archives, Liege, and Paul van den Ven, of the French school at Athens. Letters of regret were received from MM. de Trooz, Francotte, Léopold Delisle, Comte Durrieu, S. de Vries, Salomon Reinach, and others.

In the election of its presiding officer the congress was fortunate. M. H. Omont, member of the institute and keeper of manuscripts in the Bibliothèque Nationale of Paris, represents the most liberal of bibliographical methods and ideals, speaks and rules with authority and dignity. As vice-presidents were chosen MM. le Vicomte de Jonghe, Gaillard, Gayley, Hymans (director of the Bibliothèque Royale of Brussels), Kurth, Salomon Reinach, and Von Weech, of Carlsruhe.

M. Omont, having taken the chair, delivered a presidential address, in which he paid the proper tribute to Belgium for her initiative in the congress; he recalled the fact that to this country was due, as much as three centuries ago, the first attempt at manuscript reproduction by engraving, and that this attempt was made by one of the founders of the Society of Bollandists, so worthily represented in the present congress by the devoted secretary-general, the Rev. J. van den Gheyn. M. Omont then presented a brief sketch of previous efforts toward the reproduction of manuscripts, and expressed the hope that this congress might reach some satisfactory solution of the problems involved.

The ordinary sittings were held in two sections, one of studies with Brambach, of Baden, and Prou, of Paris, as chairmen; the other of technique, with Chatelain and Feyerpataky as chairmen; the resolutions adopted by the sections being, of course, subject to the action of the general congress at its closing session. Though most of the papers had already been put into print and were in the hands of the delegates, each writer was given an opportunity to enlarge upon or justify his conclusions, and the discussions were by no means perfunctory.

The scope of deliberations appears from the principal papers presented and discussed in the section of studies. Paul Bergmans, of Ghent, read an account of the previous attempts at an entente internationale for reproducing manuscripts. Maurice Prou discussed the actual condition of facsimile reproduction of maps and other official documents. A paper was presented by M. van den Casteele, of Liege, on the utility of facsimile reproductions from the point of view of official examinations of public records. Father van den Gheyn gave a detailed bibliography of Belgian manuscripts desirable to be reproduced, and Xavier de Cunha, of Lisbon, reviewed the legislation of Portugal with regard to the making of manuscript facsimiles. Bayot, of Brussels,

did for manuscripts, principally literary, what Prou had done for rolls, archives, and State papers; and Gayley and Sury (librarian of the University of Brussels) discussed methods for the organization of an international bureau, the former for the reproduction of manuscripts from the American point of view, the latter for a system of exchange of facsimiles.

Of these papers, that of Paul Bergmans was of so great importance for the history of the movement, as well as for its future, that the author of the present article has taken it as the basis of the following outline. Such occasional contributions from other quarters as have come to his knowledge he has, however, incorporated, with reference to their respective sources.

II.

The first suggestion of an international agreement for the reproduction of manuscripts of value seems, according to Bergmans,[a] to have been made by the late Doctor Hartwig, director of the University Library at Halle. His project was communicated to the International Congress of Librarians held at Chicago in July, 1893, somewhat as follows:

> I propose that you found a society which shall aim to manifold by photographic processes the manuscripts of first rank in the world. As headquarters of the administration of this society I venture, in order to preclude national rivalry, to recommend the University Library of Leyden. The director of that library, Dr. W. N. du Rieu, is a highly and widely esteemed librarian and scholar, and his institution is of ancient standing and centrally situated for international resort. Herr du Rieu has indicated his willingness to accept the management of this enterprise if requested by you to do so. With the director of this society, to whom, of course, the handling of the funds should be intrusted, would be associated a board consisting of the heads of the principal libraries of Europe and America. I would to that end suggest the head librarians of Berlin, London, Paris, Vienna, of the Laurentian at Florence, and the Vatican at Rome. If the administration would not be embarrassed by too large a body of advisers, I should suggest also the election of the head librarians of Munich, Oxford, and St. Petersburg. This directorate would be commissioned to make the selection, in accordance with the judgment of its leading members, of the manuscripts to be reproduced, to secure from the libraries affected permission to photograph their manuscripts, and to determine the annual order of publication. As yearly subscription for each member of the society I should propose the sum of 100 to 150 marks. As soon as 100 members have subscribed, the society would be founded.[b]

For lack of time the congress of 1893 could not discuss this project. It referred it to the Association of American Librarians, but that body took no definite action.

Du Rieu, however, promptly assumed responsibility for the enterprise, and in March, 1894, published an article in the Revue des bibliothèques submitting the question to his European colleagues.

> There are [said he] in every library manuscripts so precious that it would be a crime to subject them to any of the perils of travel. Of each of these codices it would be wise to make a definitive photographic copy, which should be preserved carefully in some place other than the library containing the original, and which could be loaned; or, if 100 universities would consent to a subscription of 150 francs per annum, we could make an autotypic reproduction of which each library should receive a contributor's copy.
>
> I have before me a series of responses from several of my honored colleagues, and the moment seems to me to have arrived for opening in Europe a discussion of this novel manner of supplying scholars with those treasures in our depositories which we regard as altogether too precious to allow out of our immediate keeping. It seems that the library of Leyden, because of my announced convictions and its well-known treasures, as well as on account of its geographic position, is the center designated for this international association. Before sending out a mass of circulars to the individuals concerned, I should like to read in this Review the pros and cons of this enterprise. I have no doubt that the discussion will reveal more difficulties than I recognize at the present moment.

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[a] Les tentatives antérieures d'entente internationale pour la reproduction des manuscrits, Brux., 1905.

[b] *Quoted by Bergmans from* Centralblatt für Bibliothekswesen, 1893, pp. 415–416.

Du Rieu then proceeds to enumerate a series of questions as a basis for exchange of opinion. The value of photographic reproduction of manuscripts being granted, how large should be the edition of each—one, two, or a hundred copies? Can we be sure that the photographic paper will last? If so, does science demand that each central university shall possess an exemplar of the best manuscript of, say, Demosthenes or of Plato, of Livy or of Cæsar? For palæographical studies the reproduction of the manuscript complete would, of course, be more agreeable and useful than that of a single page, such as furnished of late by the Palæographical Society, by M. Omont for famous Greek manuscripts and M. Chatelain for the best manuscripts of Latin authors, but would not the enterprise be too costly even if limited in each library to a single manuscript each year? Do not the facilities of travel by rail and of photography by independent effort render unnecessary the reproduction in full of a manuscript of 100 pages or more in hundreds of exemplars? Do the repeated editorial collations of manuscripts leave so much yet to be desired as to warrant the expense entailed in the making of 200 or 300 negatives for photographic facsimiles?

Since the enterprise [concludes Du Rieu] must assume an international character, I should like to see all the responsibility for the reproduction of a manuscript confided to the director of the library providing that manuscript for photographic publication; he will readily find in his city a studio capable of the work required; he will charge himself with the binding and the transmission of it, and the expenses will be paid *en bloc*. I can not contemplate subjecting hundreds of negatives to the dangers of travel. The facsimiles thus produced may present some divergence of execution, but are not the originals themselves divergent? The question of price will also rest with the individual studio, but always under the guaranty of the bureau of the society, consisting of the heads of the great collections at Paris, London, Rome, Vienna, Berlin, Florence, and Brussels.

As to the field, a question still remains: Shall it be merely of the Greek and Latin manuscripts or shall illustrated codices and miniatures of interest in the history of art be included in the scope of the enterprise?

Such is an outline of this summons to collaboration. It failed of success, possibly because it was ahead of its time, probably because it was too timid. The very questions raised by the author leave room for a possibility of doubt as to the fundamental utility and expediency of the undertaking. No scholar, nowadays, would regard the questions as points at issue. It is difficult to imagine any variance of opinion even in 1894. Photographic processes and materials alike had passed already beyond the experimental stage, and had indicated the path of improvement in the future; perfection was conceivable at any moment that might be called the present. The research schools of the New World were already securely established and were daily more and more conscious of the inaccessibility of *originalia*, of the untrustworthiness of reprints though never so frequently or carefully collated, and of the costs and delays of pilgrimage. It was inadvisable, so late as 1894, to admit excuses on account of which Mahomet should continue to visit the mountain. The part was no more the whole then than now, nor a page of a classic the whole classic, nor independent enterprise enterprise by collaboration. And that the cost of reproduction varied inversely with the size of the edition was known to every tyro.

No responses to the appeal of Doctor Du Rieu appeared in the Revue des bibliothèques. The Bollettino delle pubblicazioni italiane, however, issued by the National Library of Florence, printed, in the number of September 15, 1894, an article approving the enterprise and expressing hope of its speedy realization. In 1895 Du Rieu addressed a circular to his colleagues lamenting his inability to secure more than 35 unqualified adhesions, at $30 a year, to the proposed society. He says that possibly 50 subscriptions might be secured, but that since 100 are not forthcoming, he finds himself obliged to renounce the task which, on the invitation of his many colleagues and in the interest of learning, he had undertaken. "We cherish," he writes, "the confident hope that some day or other our project will be revived with more fortunate results. *Meanwhile we shall* console ourselves if the publishers of facsimile repro-

tions, to whom we already are in debt for work of great utility, may find a way to

harmonize their interests with those of librarians whose resources are unfortunately so inadequate." To Du Rieu honor is due, not only for his strenuous though unsuccessful efforts, but for the faith expressed in this, almost his last, contribution to a cause which already in the lifetime of his immediate successor at the Library of Leyden, Dr. Scato G. de Vries, appears to have arrived within measurable reach of fruition. If his withdrawal had been deferred for even a brief period, the discussion of his project would have proceeded more to his taste; for several articles in response to his summons, says M. Bergmans, had already been accepted for publication by the Centralblatt für Bibliothekswesen. During 1896 and 1897 the admirable reproductions of Greek and Latin manuscripts issued by Sijthoff of Leyden at the instigation of Du Rieu (who died in 1896) and by libraries such as the Laurentian, the Vatican, the Nationale of Paris, the British Museum, and the Bodleian, contributed not a little, by their example, to the recognition of the possibilities and advantages of work in facsimile and lent no insignificant stimulus to the movement toward centralized effort. A complete list of these facsimiles—of the Oxford-Paris Plato, the Heidelberg Plautus, the Venetus A. Iliad, the Laurentian Tacitus, the Ambrosian Terence, etc.—is easily accessible.[a] Since they were the outcome not of international but of private enterprise it is not necessary to dwell upon them here.

In 1897 the admirable reproductions by collotypic processes made in the Bodleian Library and the British Museum attracted the attention of an American professor, Charles Mills Gayley, of the University of California, who, like many another before and after, was spending his sabbatical year of vacation in copying and collating texts for a series of volumes which he proposed to edit after his return to America. He had for some time felt that one of the most serious drawbacks to scholarship in America was the lack of the original manuscripts and the unique folios and quartos necessary to historical, literary, and certain kinds of scientific research. Since these were jealously guarded in the libraries of the Old World, whence they could be removed neither for love nor money, American professors, students, and scholars of all kinds found it necessary to travel thousands of miles and to spend thousands of dollars for the purpose of consulting them, as well as to devote months or years that might be more creatively occupied to the mechanical copying or collating of them. The consideration of these facts led him to inquire of the British Museum and the Bodleian Library whether permission might be obtained by an American institution to reproduce their manuscripts and early printed books in facsimile. Being answered in the affirmative, he drew up at that time and presented to the regents of the University of California a plan for a bureau which should have for its purpose "the systematic and continuous republication in facsimile of such manuscripts and books in European libraries as can not otherwise become the common property of investigators and students; this republication to furnish the world of scholars with facsimiles as nearly as possible at cost price, according to the demand for them, and to supply the institution conducting the enterprise with a copy free of charge of each work reproduced."

In this memorial to the board of regents of his university he said, further:

Such an output of facsimiles would be an advantage to all schools of advanced research. On the one hand, the institution in charge would constitute a central and complete library of facsimiles; on the other, not only American but also foreign investigators and institutions of learning would henceforth be able to obtain at a reasonable price duplicates of whatever originals were in a demand sufficient to warrant their reproduction. Such systematic reproduction of unique manuscripts and rare printed works would materially benefit the civilization of the future, both because it would disseminate what is now confined to one or two centers of learning and because it would obviate, through this multiplication of copies, the possible loss of scientific and literary material by the destruction in part or whole (as formerly at Alexandria) of any one of the famous Old World libraries. The bureau, focusing information con-

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[a] A Bayot, L'État actuel des publications de facsimile de manuscrits, Brux., 1905; Gab. Meier, *Centralblatt für Bibliothekswesen*, 1900, pp. 1-32, 113-130, 191-198, 255-278; H. Omont, *Listes des recueils de facsimiles, etc.*, in the Revue des bibliothèques, 1903, pp. 111-178, etc.

cerning the materials of investigation wherever preserved, would immediately take an unprecedented position as a bureau of literary research—a kind of central bibliographical exchange—to which the scholars and universities of the world might turn for information concerning literary, historical, and scientific monuments, as well as for assistance toward the republication of such as might be required in their investigations.

Concerning the necessity for the reproduction and preservation of the unique and perishable manuscripts and printed materials of research no scholar needs to be convinced. But no plan providing for such labor of preservation and distribution in all lines of study, for the world and in perpetuity, has to my knowledge been attempted or drafted. Yet it seems that the method to be adopted is both simple and obvious.

Individual and diverse firms undertaking republication by facsimiles for purely business profit and within narrow limits will not find the demand great enough to support any one of them. Even a central agency attempting the enterprise will fail if it restrict its efforts to one or two specialized subjects, or its sale to a few libraries. But a bureau working for only such profit as shall insure the continuation of the enterprise (providing materials for all libraries, for all lines of research, for all scholars, and at a lower price than individual effort could effect) will find a sufficient and a steady market, for scholars are always in need of the documents of past generations—not, however, in the inaccurate form of reprints, but in that of exact facsimile. The demand will, moreover, increase with the educational incentive of the supply, as universities come to recognize that satisfactory results can be obtained only from the study of the originals or of facsimiles thereof. So far nothing substantial has been accomplished by the European librarians, and nothing will be accomplished until some self-supporting institution, both central and universal, fills the breach and systematically undertakes the function of republication.

The enterprise must be cautiously begun, and from the first for the benefit of all. We should first ask the more prominent libraries and specialists to furnish lists of works the reproduction of which is at present demanded. We should then, by collating, ascertain those most in demand; we should then give an opportunity to the institutions and persons concerned to indicate which of this second list they will engage to take if republished at a price as near cost as possible. This process of inquiry and subscription might be repeated semiannually. The various great libraries will quickly take steps to put their manuscripts in form to be photographed, or will offer them as they are, to be reproduced by such a bureau of republication. The only condition quid pro quo suggested by the British Museum and the Bodleian, in correspondence with me, is that a free copy of each facsimile be deposited in the library furnishing the original for reproduction. According to my proposition one other copy should be deposited in a central library of facsimiles; the rest of each first edition would then be supplied, according to previous demand, contract, and subscription, to the other libraries, universities, scholars, and collectors of the world at such price as should, as nearly as possible, reimburse the bureau. It would, indeed, not be improbable that subsequent editions would somewhat more than reimburse the bureau, for, since the bureau would preserve all plates, it could somewhat advance prices on editions after the first, and so the steady increase of the fund at its disposal, and therefore of its efficiency, would be assured.

It was proposed by Professor Gayley to establish this bureau and the central library under the supervision of the University of California. In 1898 the regents of the university approved the project and appointed a committee, consisting of the president, the librarian of the university, and one member of the board of regents, with the head of the department of English language and literature (Gayley) as director of the bureau, to collect the funds and set the bureau in operation. It was, however, stipulated that no financial obligation should be incurred in the name of the university. The committee were of the opinion that an endowment of $30,000 would suffice, if handled as a revolving fund; no pecuniary liability being incurred by the bureau for reproductions save on the guaranty of a sufficient number of subscribers for the output.

The efforts of this committee toward securing a proper endowment were from the first handicapped by the not unreasonable hesitancy of men of means to embark in an enterprise of which American scholars themselves had not publicly and forcefully asserted the need and permanent value, and for which the masses did not clamor. It therefore appeared best to defer the pursuit of funds until by personal correspondence and the assistance of the public press the university world had been aroused to a realization of the possibilities in this direction. After some six years of missionary campaign the project was fortunate in winning the sympathy of the New York Evening

Post. It will again occupy our attention under date of November 19, 1904, when that journal brought it before the American people at large.

The next formulation of aim and method of importance in the history of this movement was effected by an international conference for the preservation and restoration of ancient manuscripts, which met on the 30th of September, 1898, at St. Gall. The conference was suggested by Fr. Ehrle, prefect of the Vatican Library.

The more important decisions reached were as follows:

1. That a list be prepared of the most ancient and important manuscripts which in all probability are threatened by decay.

2. That specimen photographs be made of these manuscripts in order to establish their condition at the present time.

3. That a permanent committee be appointed and charged with the following duties:

(*a*) To prepare the list and the specimens provided for in articles 1 and 2 above.

(*b*) To examine processes of preserving manuscripts, and to recommend the best.

(*c*) To make public in printed form as soon as possible the processes communicated to the present conference.

(*d*) To place themselves in correspondence with librarians and technical experts for the execution of these orders.

(*e*) To make the attempt to secure from national governments the subsidies necessary to attain these results in the interest of science.

The committee appointed for these purposes was composed of Fr. Ehrle; S. G. de Vries, librarian of the University of Leyden; and Zangemeister, head librarian of the University of Heidelberg.

Beyond indicating the lamentable condition of many of the most valuable monuments in manuscript of the literary, historical, and scientific knowledge of the world and suggesting methods of restoring and preserving them this conference attained no practical result, for, according to M. Bergmans, the committee never met. The moral effect, however, has not been lacking. Nay, in the light of what was purposed, but not accomplished, and of the subsequent conflagration at Turin, a melancholy interest attaches to the timely forebodings of St. Gall.

At the congress of librarians, held at Paris in 1900, the aged and highly respected dean of European librarians, Leopold Delisle, administrator-general of the Bibliothèque Nationale, added his voice to this succession of warning and appeal. As president of the congress he called attention to the dangers that beset the most beautiful and precious manuscripts at the hands of students only too often careless in the extreme.

He called for phototypic reproductions of the more important treasures—not difficult of selection and location—which might be substituted for the originals as material for research. He pointed out that editions de luxe, such as the Sijthoff Horace and Homer and the Vatican Virgil, were too expensive for such an end; that facsimile reproductions in octavo or small quarto, such as those prepared by la maison Berthaud and displayed in the Mazarin gallery, would well serve the purpose. He cited the wisdom of the keepers of the French national archives, who had thus already placed beyond danger of total destruction certain literature written upon crumbling papyrus, and he commended the subject as a whole to the consideration of the Congress.

Once more the consideration of concerns apparently more immediate precluded action upon this, the most pressing and practical of all.

Some catastrophe to the priceless and perishable remnant of a literary first-born, some irremediable loss to the humanities, such as had been apprehended by successive apostles of systematic reproduction by facsimile, seemed to be the sad and only means of shocking the world into a realization of what should have been averted, *of what must yet be precluded* from possibility of recurrence. On the 25th and 26th

of January, 1904, the Royal University Library at Turin was well nigh reduced to ashes; and the world is still trying to discover how much of its history has gone up in smoke. Of Greek manuscripts alone 401 were destroyed, and much material of information concerning medieval life and letters irreparably lost. The experts are giving thanks whenever the small privilege is accorded them of identifying and cataloguing the titles of "Arabic, Persian, Turkish, and Hebrew parchments as these lie in their own ashes." The united academies of France and Germany mourn the records of the year 1286, which they just too late were planning to reproduce and publish. The world regards with gratitude the few scholars who, like Krumbacher, had had the foresight painfully to copy and collate here and there a treasure which henceforth will be accessible in that copy alone.

In the French Academy of Inscriptions and Belles-Lettres Paul Meyer expressed at once his regret that more of the vanished treasures had not been made current by reproduction, and his satisfaction that even a few, such as the text of the chronicler Haytoun and the beautiful manuscript with miniatures of the Hours of Turin had been saved in facsimile by the efforts of the academy. Salomon Reinach called the attention of his fellow-academicians to the fact that it was the duty of science, of governments, and of academies, to take measures to photograph documents of the first rank. If the catastrophe of Turin could produce this result there would be in it some melancholy consolation for the regrets mingled with remorse which the scholarship of Europe now experienced because of the irremediable disappearance of so many historical sources and works of art. M. Dieulafoy, agreeing with M. Reinach, urged the academy to represent to the minister of public instruction the necessity of coming to an immediate decision favorable to the proposal for national assistance in this matter of reproduction. On the 2d of February, 1904, the Chamber of Deputies was accordingly memorialized upon the subject, and the following resolutions were introduced:

1. A special appropriation of 100,000 francs shall be placed at the disposal of the minister of public instruction for the photographic reproduction of the principal manuscripts preserved in the great libraries and national museums of France.

2. The Academy of Inscriptions and Belles-Lettres is commissioned to effect the execution of these reproductions in such way as shall best subserve the interests of art and science.

Since the day is not far distant when a similar appeal will be made, if not to the Congress of the United States, at any rate to some American capable of endowing an institution of similar scope and aim, the reasons accompanying this proposition are subjoined.[a] The resolution was referred to the commission du budget, and, though nothing has transpired up to the present, it is still to be hoped that a favorable report may result.

We now return to the American project, which in detailed form, and with suggestions on method and cost, and a specimen list of manuscripts and unique printed texts deserving of reproduction, was published by the New York Evening Post on the 19th

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[a] From Bergmans, p. 13: Documents parlementaires de la Chambre des Deputés, 1904, p. 63, annexe No. 1479:

Messieurs, les richesses inestimables conservées dans nos musées, des trésors précieux pour l'histoire et la science, sont exposés à disparaître entièrement par suite d'un sinistre toujours possible.

L'incendie récent de la Bibliothèque royale de Turin remet une fois de plus en relief la nécessité de prendre toutes les mesures susceptibles de diminuer les risques de destruction définitive qui menacent sans cesse tant de riches monuments de notre gloire nationale.

Sans doute, des précautions sont minutieusement prises pour éviter les désastres et des gardiens vigilants sont continuellement en éveil; malgré tout, un incendie peut se déclarer d'un moment à l'autre.

Il importe donc que nous mettions à profit les moyens capables de préserver d'une ruine complète les documents, si intéressants pour le présent, que nous ont transmis les générations du passé.

La photographie nous permet de créer une réserve de reproductions qui rendrait moins fâcheuse pour nos savants la perte des plus importants manuscrits originaux recueillis dans nos principales bibliothèques.

C'est pour assurer ces reproductions, rendues faciles par les progrès de la photographie, que nous *vous demandons de voter la proposition* de loi suivante.

of November, 1904. As before, the author, Gayley, calls for an endowment for contingent expenses and a revolving fund (to be applied strictly in the supply of such demand as may be guaranteed by a number of subscriptions sufficient, on the one hand, to meet expenses, and, on the other, to furnish each subscriber with facsimiles approximately at cost). He points out that with the cooperation of universities, libraries, and learned associations in Europe, America, and the colonies not only will a steady market be assured, but also the continuous judgment of experts concerning the documents most necessary to be reproduced. He repeats his suggestion of an international bureau of literary research, to be situated, with a central library of facsimiles, at some focus of intellectual activities; but this library (equipped with at least one copy of each facsimile reproduced by the American enterprise, and with copies, obtained by exchange, of whatever is reproduced by European enterprise) appears now not as an affair attached to any single university, but as a cooperative and national institution.

Indicating to what extent expenses may be reduced by cooperation, he says:

A calculation on the basis of a 50-page quarto in the Bodleian library and of the advertised rates of photographic reproduction (collotypic) as now practiced by the Clarendon Press, Oxford, shows that we could secure 100 copies of the quarto at a cost price of $2 each copy, whereas an individual undertaking to secure one such facsimile would have to order an edition of at least 20, each of which would cost him $5. To secure his one copy at $5 he would, in other words, have all the labor of the enterprise and the responsibility of disposing of the 19 superfluous facsimiles. The bureau, however, could sell at a gross profit of 50 per cent or even at 100 per cent and still undersell the individual competitor. This is an example on a small scale. One hundred facsimiles of such a work as Homer's Iliad would cost us at least $2,000. And so on, upward and downward.

The expenses of the proposed bureau are summed up as follows:

1. The payment in advance of the republishing press employed; for the present the Clarendon Press, Oxford; later an independent equipment of our own capable of undertaking this work in all libraries and museums.
2. The payment of a special agent to administer the details of the business, to report orders to the bureau, and arrange for the transmission of books, and keep the minutes of the board of directors.
3. Office rent, store rent, and ultimately rent of a fireproof storehouse.
4. The expenses of correspondence and such other incidental costs.
5. Expense of clerks for cataloguing, indexing, etc.
6. The expenses of general supervision and such other compensation as may be advisable and necessary, proportionate to the time, effort, and skill demanded by the direction of the enterprise.

These are expenses each of which will grow with the extension of the operations of the bureau; but with that extension there will grow the ability to meet the cost.

To reduce the thing to a practical basis—supposing that it were deemed advisable to commence by republishing 20 important manuscripts or unique prints, $20,000 would be sufficient on the following calculations:

100 copies of each of 15 old English plays and other literary rarities, at $200 ..	$3,000
100 copies of each of 5 classical manuscripts, e. g., "Iliad," at $2,000.....	10,000
100 copies of each of 5 historical manuscripts or prints, at $1,000.....	5,000
100 copies of each of 8 scientific manuscripts, at $250.....	2,000
Total.....	20,000

For contingent expenses an additional $5,000 would be sufficient. A sum of $25,000 would suffice to launch the enterprise and make known its possibilities. This would constitute a revolving fund for the charges of republication. Thereafter it is estimated that the current expenses and the establishment of a reserve to meet necessary payments of cash in advance of the returns from the subscribers for the series would amount to $10,000 per annum.

That is to say, a cash endowment of $25,000 is to be desired and a capital fund (say of $200,000 to $300,000) so invested as to produce an interest of $10,000 per annum.

This communication was strongly backed by a leading article in the same issue of the Evening Post, in which Prof. Hammond Lamont commends the project to the consideration of American scholars, and calls for correspondence with a view to practical cooperation on the part of scientific societies, libraries, individual scholars, and bibliophiles. "Cooperation among the institutions and persons most interested is the first step," says he. "Financial backing is the second. The first would, we believe, inevitably lead to the second. * * * Here would be an extraordinary opportunity by a single stroke to confer upon scholars of all races and for all the future a great boon." Numerous letters of comment and approval were received by the Evening Post and printed during the ensuing months. Among the rest, from Herbert Putnam, Librarian of Congress; Dr. James H. Canfield, librarian of Columbia; H. L. Koopman, librarian of Brown; G. W. Harris, librarian of Cornell; Asst. Prof. Charles Upson Clark, of Yale; George Parker Winship, librarian in Providence; E. A. Richardson, librarian of Princeton; Mrs. Z. A. Dixon, librarian of the University of Chicago; Profs. J. C. Rolfe and Felix E. Schelling, of the University of Pennsylvania; Bishop Henry Codman Potter, of New York; Worthington C. Ford, of the Library of Congress; Profs. Arley B. Show, Clyde A. Duniway, E. D. Adams, H. L. Cannon, Max Farrand, and H. R. Fairclough, of Stanford; Profs. C. H. Grandgent and M. H. Morgan, of Harvard; Azariah S. Root, librarian of Oberlin; President James B. Angell, Prof. M. L. D'Ooge, and Prof. Fred Newton Scott, of the University of Michigan; Profs. Alexis F. Lange, W. A. Merrill, and G. R. Noyes, J. C. Rowell, librarian, and Messrs. Alfred Emerson and Walter Morris Hart, of the University of California; David H. Browne, a metallurgist of New York; Prof. A. V. Williams Jackson, of Columbia; Prof. William M. Sloane, of Columbia; Profs. F. I. Carpenter and R. G. Moulton, of Chicago; President Harper, of Chicago; President Schurman and Profs. J. W. Jenks and J. M. Hart, of Cornell; Prof. T. W. Hunt, of Princeton; Profs. Tracy Peck and G. B. Adams, of Yale; and Prof. A. R. Hohlfeld, of Wisconsin. Private letters commending the enterprise were received from Profs. Calvin Thomas, G. R. Carpenter, William Sloane, and A. V. Williams Jackson, of Columbia; Gildersleeve and Bloomfield, of Johns Hopkins; William C. Lane, of Harvard, and a number of other scholars.

In the March-April number of the Revue archaeologique, M. Salomon Reinach, discussing the proposal made in February, 1904, to the French Chamber of Deputies, hails with satisfaction the American plan, saying that he had remarked some five years before that the United States had few ancient manuscripts but much money, and that if he were an American he would propose just such a federation of public libraries for the photographic reproduction of manuscripts of the first importance, as was now advocated in the Evening Post. Commenting further upon Professor Gayley's project, he makes the following valuable suggestions concerning process, format, and price:

1° Pour les mss. intéressants par leur contenu, mais qui ne sont pas des œuvres d'art, et pour les exemplaires uniques de livres analogues, il faudrait des reproductions en simili-gravure, dans le format grand in-8°, c'est-à-dire, généralement, une forte réduction; il est inutile de donner de simples documents dans la grandeur des originaux; 2° Pour les mss. ornés de miniatures, il faut des publications intégrales comme celle que j'ai faite, grâce au fonds Piot, des Grandes Chroniques de Saint-Pétersbourg, dans un format qui doit être généralement l'in-4° et par les procédés plus coûteux de l'héliogravure ou de la phototypie; 3° Suivant que les anciennes cartes ou autres feuilles isolées sont ou ne sont pas des œuvres d'art, il conviendrait d'appliquer l'un des deux procédés dont il vient d'être question; 4° Le prix d'aucun fac-similé ne devrait depasser 2 francs le feuillet; il ne faut pas que ce grand projet devienne, entre les mains d'un "avide éditeur," un prétexte à rançonner le public.

That not Americans alone were interested in this project for systematic reproduction of manuscripts was further shown by the adhesion of Guido Biagi, prefect of the Laurentian and Ricardian libraries in Florence, who, writing in the Evening Post of May 10, says:

Mr. Gayley's plan seems to me worthy of the highest consideration, especially by the *scholars of Europe. I think* that all institutions of learning and all scholars ought to be

interested in the matter, both for the progress and spread of science and for the preservation of the treasures of ancient culture, so constantly exposed to all kinds of peril. I therefore deem it our duty to put this plan into the most practicable form.

Signor Biagi feels that "founding an international bureau to centralize information for these reproductions is highly commendable," and that "an international bureau would probably command resources and secure privileges which might be granted to the investigators of no one nation."

III.

We now arrive in this history of the movement at the beginning of 1905, when the Belgian Government, through its minister of the interior and of public instruction, took the initiative in the organization of the recent International Congress at Liége. Continuing with the report of the proceedings of that congress—August 21–23—we note that, in connection with the discussion of M. da Cunha's paper on Portuguese legislation concerning the reproduction of manuscripts, submitted to the section on studies on August 22, a lively interchange of thought was evoked regarding the propriety of appealing to national governments for direct financial assistance. The divergence of opinion was so decided that no appeal was resolved upon. Far otherwise with the proposal to call upon the powers for the exercise of moral suasion in the case of libraries which persistently have refused to open their treasures to the makers of facsimiles. As to the desirability of founding a bureau for the reproduction of manuscripts in America and of finding the money by benefaction, if possible, in that country, naturally no difference of opinion existed; and still it was evident that even if such a bureau were to be dependent upon the patronage of libraries, universities, and individuals, a very considerable part of its support (by purchase or exchange of facsimiles) would come from the learned institutions of Europe. Both before and during the congress the delegate of the United States was assured of the hearty cooperation of the leading libraries—the Bibliothèque Nationale, the British Museum, the Bodleian, the Trinity College, Dublin, the Vatican, etc.—in the matter of permitting the reproduction of manuscripts without restriction and on the most liberal terms.

The reports of M. Bayot and Father van den Gheyn, the former on the history and actual condition of publication by facsimile up to the present time, and the latter on the manuscripts of Belgium most worthy to be reproduced, were of the greatest practical value. So also the report of M. Prou on facsimiles of state papers, with its admirable bibliography of reproductions up to date. Unfortunately the limits of this review do not admit of a detailed transcription of their contents, and a mere summary would be futile; but since they are already in pamphlet form and are incorporated in the Actes du Congrès,[a] they will in the future be at the service of individuals and institutions interested in facsimile reproduction. M. Bayot's bibliographical list is, of course, based upon those of Omont, Gabriel Meier, Pirenne, Bourmont, Grand, Prou, etc., but it is more than an ordinary bibliography in its historical execution and its résumé of successive methods of technique. From Father van den Gheyn's selection of manuscripts necessary to be reproduced from the libraries of one little kingdom scholars may obtain a vivid idea of the enormous possibilities of reproduction on a general scale.

Among the resolutions adopted by the congress those of especial significance to the future of American scholarship in the humanities have been already summarized by the author of this report in an article in the New York Evening Post, as follows:

One favoring the formation in every country of a commission composed of specialists for the purpose of designating the manuscripts most desirable to be reproduced in facsimile; another requesting governments to draw up regulations permitting scholars to obtain, on the most liberal terms possible, the reproduction of manuscripts in which they are interested, and providing for the transmission to the various governments concerned of this resolution, together with a list of the libraries, museums, and other

[a] MM. Misch et Thron, éditeurs, 68 rue Royale, Bruxelles.

depositaries of which the regulations are at the present time in every way satisfactory; a third expressing a desire to see published (*a*) a list of the manuscripts reproduced in full by facsimile up to the present day; (*b*) so far as possible, a detailed bibliography of facsimiles contained in collections of specimens; also a sentiment that facsimiles of manuscripts should preserve the format of the originals, appear as bound volumes, and when feasible be printed on both sides of the sheet; furthermore, that while it is not necessary that facsimiles be accompanied by scientific commentaries, they should always be prefaced by a minute description of the originals reproduced and of the process by which the reproduction has been obtained.

The congress passed a resolution unreservedly indorsing the American project and desiring Professor Gayley to take steps to organize in the United States a bureau for the systematic reproduction of manuscripts and other originals necessary to the promotion of research. It designated also, as requested by Professor Gayley and Prof. Salomon Reinach, a permanent international committee for the prosecution of the various interests determined upon or discussed by the congress, composed of the following representatives of the countries concerned: Brambach, of Carlsruhe; S. de Vries, of Leyden; Ehrle, of the Vatican Library in Rome; Gaillard, of Brussels; Gayley, of California; Karabacek, of Vienna; Lange, of Copenhagen; Nicholson, of the Bodleian Library in Oxford; Omont, of Paris; Putnam, of the Congressional Library in Washington; Salomon Reinach, of Paris; Traub, of Munich; and Van den Gheyn, of Brussels. The committee was authorized to add to itself specialists whose assistance may be desirable. An important part of its function will be to lend the weight of distinguished names and expert authority to all efforts of its American members directed toward the establishment of an American bureau of republication and library of facsimiles, also to assist in designating manuscripts most fitting to be reproduced, and in procuring the permit necessary from the libraries or governments controlling the originals. The committee will take steps to execute the resolutions of the present congress and will call another when and where it may seem proper. Paris, New York, and Washington have already been suggested, and one of these three will probably be selected as the seat of the next international convention.

The congress passed also resolutions aiming at closer uniformity and increased facility in the reproduction of maps, coins, and seals, and indicated its approval of certain technical processes discussed and recommended by the section charged with that aspect of the question. In regard to the project of M. Sury for an international bureau of exchange situated at Brussels, it was of the opinion that the end in view could be best attained by an extension of the existing international system of library exchange to cover facsimiles of manuscripts, coins, and seals.

On the whole, though apparently of interest only to specialists, the resolutions adopted by the congress are of the greatest concern to the scholarship of the New as of the Old World, and it is a cause of especial gratification that so much that is of immediate and practical significance has been accomplished.

The writer of this report presented the question of the feasibility of forming a cooperative bureau of republication to the Association of American Universities which met in March, 1906, in Berkeley, Cal. He believes that an annual subscription of at least $100 from each of 50 university or college libraries, for value to be received in facsimiles of manuscripts, together with what may be expected from the great libraries, such as that of Congress, and from individual collectors, will suffice to create a working model of both bureau and central library, capable of enlisting the practical interest of some financial benefactor.

CHAPTER IX.

THE NEW YORK SECONDARY SCHOOL SYSTEM.

AN ADDRESS BY ANDREW S. DRAPER, NEW YORK STATE COMMISSIONER OF EDUCATION, AT THE JOINT MEETING OF THE ASSOCIATED ACADEMIC PRINCIPALS, THE COUNCIL OF GRAMMAR SCHOOL PRINCIPALS, THE SCIENCE TEACHERS' ASSOCIATION, THE TRAINING TEACHERS' CONFERENCE, AND THE DRAWING TEACHERS' CLUB OF THE STATE OF NEW YORK, AT SYRACUSE, N. Y., ON DECEMBER 28, 1904.

* * * There have been three fairly well-defined steps in the making of American secondary schools: First there was the Latin grammar school of the colonies; second came the academy, which prevailed and flourished from the Revolutionary war till past the middle of the nineteenth century; and, third, the public high school, which has come into its estate in the last half century.

THE COLONIAL GRAMMAR SCHOOL.

The colonial grammar school took its name and its character from the early cathedral grammar schools and the monasteries. There were not many of them and they were for the greater part both local and temporary. They were in almost every instance fitting schools for the colleges. They did not scatter their affections. Each one was the instrument and feeder of a particular college. They prepared pupils for the college entrance examinations, but they had to go far to supplement the meager instruction received in the home schools or, perhaps, oftener in the homes where there were no schools at all. Of course they observed and inculcated the religious beliefs of the colleges which they supported.

The character of the New England grammar schools at the middle of the seventeenth century will be seen from the statement that "when scholars had so profited at the grammar schools that they could read any classical author into English and readily make and speak true Latin and write it in verse as well as in prose, and perfectly decline the paradigms of nouns and verbs in the Greek tongues, they were judged capable of admission in Harvard College."

At Princeton, a century later, "candidates must be capable of composing grammatical Latin, translating Virgil, Cicero's Orations, and the four evangelists in Greek, and must understand the principal rules of vulgar arithmetic," and this controlled the work of such grammar schools as there were at that time in the middle colonies.

These schools are commonly called "free schools," but they were not wholly free. They claimed tuition fees, depended upon generous gifts which they often secured, and looked to permanent endowments which some of them realized. Often gifts of lands or some special revenues were made by the town. Certainly they were not public in the sense that they were supported by uniform taxation. The term "free school" seems to have been used to designate schools not restricted to a particular class of pupils.

New England led in the formation of these early classical schools, because New England was *New* England. Institutions in New England naturally enough copied institutional life in Old England. The English peasantry had no schools. The English nobility and aristocracy maintained colleges and fitting schools for their own. The grammar schools, like the colleges of which they were really a part, came from the higher classes and were necessarily exclusive. There was a fine aristocracy—indeed, a gifted and, speaking relatively, a learned aristocracy—in New England, and naturally enough

it followed the ways of the mother country. Often it improved upon those ways. The growing spirit of democracy made this particularly true in education.

The Dutch were the first to set up the really free elementary school in America. They brought more democracy with them than the Puritans did. The Pilgrims had more of it, man for man, than either; but there were not enough of them to bring a very great quantity or propagate it very rapidly. Before the English overthrew the Dutch there were many elementary schools in New Netherland. There were only one or two grammar or classical schools. After the English triumphed all of the Dutch schools disappeared. Education was a bone of contention. The English had no disposition to encourage elementary schools for Dutchmen. It seemed perilous to them. In the more than a century from the English invasion to the Revolution there were two, and only two, schools established by the Dutch with the English official approval. Both were grammar schools. The English crown could tolerate Dutch classical schools rather than Dutch elementary schools. That much seemed reasonably safe when the teachers had to be approved by English bishops. One of these schools was as transitory as classical; the other was splendidly persistent, for it merged into Columbia University.

RISE OF THE ACADEMIES.

There is nothing more interesting in our history, or in any history, than the relation of the democratic to the educational advance. The growth of sentiment and feeling which forced the Revolution was quickly reflected in innovations upon the character of the schools. The colonial grammar schools were pushed down into unoccupied territory from the exclusive institutions of such aristocracy as there was. They were the instruments of a distinct copartnership between church and state. They were commoner and stronger where that copartnership was the widest and the most exact. They were few and weak where that relation was nonexistent or ineffective. But of course until real democracy began to assert itself there were no schools save the exclusive ones provided by the crown and church. With the approach of the Revolution, and resulting from the same causes, new social, ecclesiastical, and political conditions produced a new order of schools. The tendency toward the independence of governmental and ecclesiastical affairs was developing and the close relation between church and state which so long obtained in the Puritan theocracy was weakening. The effect upon the schools was twofold—to make the lower grades of schools the instruments of the democratic advance and to stimulate private and denominational effort in the interest of the old order. The results were the common elementary school, developed more slowly than we are accustomed to think, and also a new institution of much higher grade under private and denominational control, with more exact legal and corporate organization and powers, and not entirely without state largess. The grammar schools did not wholly disappear, but they rapidly decreased in numbers, and such as lived contracted their curriculums and shed their denominational bent. A very few, notably the Boston Latin School, have been adopted by the public and have come down to the present day retaining a distinct classical curriculum. Wherever this has occurred it has been in close association with other secondary schools with wider courses and freer electives.

Even before the Revolution an academy appeared here and there; but it needed independence to settle matters. And independence did settle matters. * * * The elimination of the influence of English politics from the affairs of government in America, the removal of the oversight of the English church over religious affairs in this country, and particularly the distinct enunciation of the entire separation of state and church in the scheme of government which rose above the fires of the Revolution gave decisive impulse to new educational ideas and distinct form and energy to a new manner of school.

The American academy was not a democratic institution, but it was more demo*cratic than the colleges* and Latin schools which antedated it. It was as demo*cratic as the hold-over influences* or the uncertain political theories of the time would

permit it to be. It had an independent legal organization with an independent though perhaps slender endowment and a self-perpetuating control. If it aimed to prepare pupils for college it undertook even more to prepare pupils for life when they were not going to college. Often its work was wider than that of the college itself. It laid new stress on the study of English, including its grammar, rhetoric, and the art of public speaking. It went more broadly into mathematics, including surveying and navigation, and it made important beginnings in the natural sciences. Chemistry and physics were favorite subjects. History was universally taught. Even architecture and stenography got a start. French was very common, and German appears occasionally. If Latin and Greek continued to be upheld they were paralleled by innumerable courses, which were clearly enough of democratic origin, and must surely change the outlook of communities and propagate the democratic principle in affairs. It was attached to the fortunes of no party in politics, and, although it was devoutly religious in spirit, it of necessity came to serve a constituency which was much broader than the membership of any single church. It exacted fees, but commonly far below the measure of its necessities, and its democratic tendencies disposed it to help all it could. It surely needed the aid which the state was disposed to give, and as the state was a democratic one the fact stimulated the democracy of the academy itself.

THE NEW YORK ACADEMIES.

By the act of April 13, 1787, the board of regents of the University of the State of New York was given the power to charter academies. At the first subsequent meeting Erasmus Hall Academy, now Erasmus Hall High School of Brooklyn, was chartered. At the next meeting Clinton Academy at East Hampton, in Suffolk County, was chartered. In 1794 there were 12 of these academies, in 1809 there were 30, in 1829, 48, and in 1834, 64.

It has been the policy of New York, practically from the beginning, to give aid and encouragement to secondary education. When the elementary school system was developed the State undertook to assure a primary school education to every citizen. It would not support it, but has always compelled every district to maintain an elementary school and has made the stronger districts aid the weaker ones. It has never gone so far as to assure a secondary school to every community by requiring towns or districts to maintain them, but it has gone far to induce communities to establish them by giving substantial aid to such as were established.

In 1790 the State established what is known as the literature fund by authorizing the regents to take possession of certain State lands and apply the rents and profits to aid colleges and academies. In 1813 and again in 1819 the income of funds received from other State lands were added to the literature fund, and in 1827 securities to the value of $150,000 belonging to the canal fund were added to it. Subsequent legislation transferred annually $28,000 from the United States deposit fund to the literature fund.

For convenient reference, and because always interesting, I insert here a table showing the distribution of the literature fund to academies in the years 1820, 1830, 1840, and 1860, which will indicate the number of schools, the whole number of pupils, the number of academic pupils, the sums apportioned, and the average amount to each academy. It is as follows:

	1820.	1830.	1840.	1860.
Schools	30	58	118	160
Scholars	2,218	4,303	10,881	28,941
Academic scholars	636	2,222	8,841	16,514
Amount apportioned	$2,500	$10,000	$40,000	$40,000
Average amount to each	$83	$172	$339	$250

* * * The whole number of students reported in academies in 1834 was 5,330, and the number allowed by regents in the distribution of the literature fund, as having pursued the requisite studies, was 3,741; the value of academy lots and buildings was $290,825; value of other real estate, $19,722; the value of philosophical apparatus and library, $21,795; the value of other personal estate, $139,130; number of books in libraries, 10,145; tuition money for the year, $73,472; income from permanent funds, $9,275; amount received from the State, $12,000; debts due by academies, $72,137; number of teachers, 217; compensation of teachers, $68,924.

A study of the subject makes it clear that the regents were discriminating in granting charters. They required satisfactory proof that the institution had sufficient means to support life and perform its work creditably, and they saw to it that it was not likely to flourish at the expense of a previously incorporated institution. This led to applications to the legislature, which were often granted with less care. Between 1819 and 1830 there were more than 40 academic charters granted by the legislature, mostly without conditions. Upon the whole, however, it may be said that the academies of the State had an excellent and in many instances even an illustrious history.

But in time these splendid institutions were forced to give way to another class of institutions more democratic than themselves. About 375 academies were incorporated between 1787 and 1884. By 1884 very nearly 50 had been merged in union schools or had become separate high schools; four or five had been resolved into State normal schools, three or four had served as college foundations, and about 250 had become extinct. A few, after being chartered, were never organized. There are now about 30 of the old-time private or denominational incorporated academies still in existence. During the last twenty years there have, however, come under the visitation and inspection of the regents a large number of modern denominational schools of academic grade, which more than makes good the number of academies reporting in 1884. But the public high schools have come to far outnumber them.

THE HIGH SCHOOL MOVEMENT.

The academies were the outcome of the best thinking of almost a century of American progress. They were the embodiment of as fine heroisms as ever found expression in any educational institution, and there have been no finer in the world. They were as democratic as the most aggressive democratic spirit of their day could make them. They did a work entitling them to enduring gratitude, because of wide and permanent value. Then, as a prevailing class, they were forced aside by a new class of institutions, which sprang out of fresh and advancing thought, were more democratic, met a wholesome and imperative demand for a wider range of work, had a much wider and more potential influence, and gained new and very different ends.

The academy was an incorporated and endowed institution, though commonly so slenderly endowed as to be transitory. The public high school is supported by taxation, managed by public officers, and more independent and permanent. The high school is free; the academy was as free as it could be, but it lived largely upon fees. The difference appeared in the pupils, in the instruction, in the outlook, and in the measure of stability. The interest of the mass is the best endowment an institution can have. It is even more steadfast than statutes. The taxing power is not so spasmodic as beneficence.

The work of the academy connected with the colleges and had no organic connections below; that of the high school connects with the public elementary schools below and forces the colleges after long centuries of opposing theories to establish relations with the upper end of their courses or waive the hope of preeminence.

The academy was pushed down into unoccupied territory from above; the high school was pushed up into the same field from below. The business of one was to serve interests that were above but not quite altogether heavenly; that of the other was

to help on the broader and more worldly concerns that were below. In time it transpired that with all this in the same territory there was now and then some abrasion.

The function of the academy was to prepare for college and incidentally for life; that of the high school is to prepare for life and incidentally for college. The one was classical with some practicalities; the other is severely practical, and generally in the best sense, with some classical appurtenances. The academy was essentially an advanced school for boys; the high school is as essentially coeducational.

The courses of the high schools have widened out from the old standbys and gone into about everything that can aid one to earn a living. There is mental discipline in study that informs the mind and applies to life.

It is interesting to study the first decisive manifestations of this high school movement. They came in the West—in what was then the West—where there was nothing in the way, where democracy was freer than in thoroughly settled social conditions, and where the masses were doing things on their own account. The movement advanced on lines of least resistance, but when forced it accepted the gage of battle, and when it did it won or drove a mutually advantageous compromise.

The movement from the beginning and always has been strong in the West—in whatever came to be the West. A western village is ashamed to be without a high school. The building is the finest and the most conspicuous in the settlement. It is so in all of the North Central, the Mountain, and the Pacific States. Of course it results in many struggling high schools, but in many more which are as fine as any in the land. And, moreover, they will abundantly take care of a splendid future.

They will do that not so much because of what they are, but because of their buoyant spirit and their universal popularity, because they are everywhere and grow steadily, and because of the relations in which they stand. There are sixteen grades in the free school system in the great West. The continuity of the system from the beginning of the kindergarten to the graduate school in the State university is perfect and the road is open. Certificates of work done in the school below admit to the school above without examination. The inadequacy of a written examination as a test of the knowledge and the power of pupils when the examination is set by strangers who have had no immediate connection with previous work seems to me obvious. The acceptance of certificates helps pupils to go to the university who would not go. It stimulates and steadies all of the schools below. It articulates the whole educational system and gives each part intelligent interest and pride in all the other parts. It does not lower standards in the universities. The tests of university work are as severe and the degrees as exalted as anywhere in the country. Eastern universities try not to believe it, but they will have to open their minds and modify their opinions.

And a further word might be dropped by way of a not over venturesome prophecy. The old line universities which have come to be great may of course continue indefinitely upon old line policies with only very slight modifications. But unless they go further in accepting, not quietly or stealthily, but openly and avowedly, the credentials of high schools of unquestioned standing, unless everyone who has in himself the reasonable possibilities of doing their work has his free chance, unless they guard against letting snippery and second-hand culture give tone to their character and flavor to their doings there will be free public universities in some of these Eastern States before all of us die.

The demand of our democracy for free education to the very limits of human knowledge is aggressive. It has grown more aggressive through the success of the public high school movement and as a result of the influence of high school graduates upon the sentiment of the country. It is going through the land. It is a demand which will have to be treated politely and negotiated with or there will be another issue, which ought to be avoided, between public and private institutions.

The figures concerning the high school movement are as interesting as any figures

are likely to be. Commissioner Harris tells us that at the turning point of the last century there were but 11 high schools with progressive courses continuing from two to four years and covering advanced studies in foreign languages, mathematics, literature, natural science, and history. In 1860 there were 44 of these schools; in 1870, 160; in 1880, 800; in 1890, 2,526; in 1900, 6,005. This remarkable growth has been decisive in every section of the country—the South by no means excepted—but it has at all times been specially noteworthy in the Mississippi Valley States.

THE NEW YORK HIGH SCHOOLS.

But the advance of the secondary schools in New York is of chief concern to us to-night. From the very beginning of statehood the bounty of the State has gone liberally to these schools; and the return has approved the policy and justified the investment.

What is known as the literature fund, as already stated, was established in aid of secondary education in 1790. The stream made a fine start, and it has gathered volume in its progress. It is but just to say that no other State has anything like such a record. The State appropriation now for this purpose is $350,000 annually, which is apportioned on the basis of $100 to each teacher, not to exceed $250 for approved books and apparatus provided the school supplies a like amount, and a proportionate share of the balance on the basis of attendance of academic students. * * *

In 1822 the legislature passed an act making the trustees of Farmer's Hall Academy in the village of Goshen, Orange County, trustees of the common school district when a majority of the taxable inhabitants of the district should give their consent thereto. An act similar in all respects was passed in 1823 concerning the academy and the common school district at Oyster Bay in Suffolk County. Here was the nucleus of the union school movement.

The first use, certainly the first legal use, of the term "high school" in this State seems to have grown out of the combined, or larger, or the little more advanced school of the Lancasterian movement. In 1825 an act was passed by the legislature incorporating the "High School Society of the City of New York," and in the next ten years a dozen other similar acts were passed. Governor De Witt Clinton gave that movement and this legislation his warmest support. While the institutions here provided for were far from public high schools as we use the term, they were quite clearly the first fruits of the public high school movement. And the charters of at least two or three of these institutions contained the first distinctly recognizable factors of the public high school, for they consolidated school districts, they associated academies and elementary schools together under public management, and they combined classical instruction with instruction in the useful arts.

The act of 1853 contemplated such schools everywhere and for the election of boards of education for their management. These union schools were authorized when there was an academy in their district to make the same the academic department of the union schools upon the consent of the board of trustees of the academy. Thus the process of elimination and absorption went on, and the union schools with the resulting academic departments, and then the independently organized high schools, came to possess the land.

The present number of academies and high schools is as follows:

Academies (incorporated)	102
Senior academic schools	3
Middle academic schools	12
Junior academic schools	25
Special academic schools	3
Total	145

High schools	407
Senior high schools	56
Middle high schools	60
Junior high schools	128
Special high schools	4

In the State, during the decade 1890–1900, while the growth in enrollment in the common schools was 16 per cent, the number of public secondary schools increased 140 per cent; the number of academies (including denominational schools) 34 per cent; the total net property of secondary schools and the number of secondary students more than 100 per cent. In 1903 secondary schools reported 95,096 students and a total net property of $33,771,006.27, with expenditures for the year of $7,106,999.90, as follows: High school property, $14,400,278.45; high school expenditures, $5,007,055.02; academic property, $19,370,727.82; academy expenditures, $2,099,944.88. * * *

Beyond this the State has entered upon the policy of making an allotment to the high schools for the tuition of pupils who may come from districts without high schools in order to equalize the State largess for secondary education to all of the people, and particularly to make sure of aiding the more aggressive pupils in the less fortunate districts. The appropriation for this each year equals more than half of the entire sum which the State appropriates annually for the encouragement of secondary education.

From this it is clear that neither the State government nor the people in their local communities have been indifferent or unintelligent in the upbuilding of secondary schools. Taking the whole State together, in spite of the fact that the hindrances to the diffusion of higher education augment with the size and particularly with the congestion of population, New York justifies the splendid commendation of the author of The Making of the Middle Schools. If the special drawbacks which present themselves in the metropolis were to be eliminated the presentation would abundantly show not only the best organized system of secondary education developed on American soil, as Professor Brown puts it, but it would show about as abundant and energetic, and probably more evenly distributed, provision for secondary instruction as will be found anywhere in the land. * * *

But before passing from the city of New York it ought to be distinctly said that the rapidity of growth in the high schools located within the territory embraced by the boundaries of Greater New York since 1897 is altogether unprecedented in the history of education in this country. In 1897 the number of high school students was 2,360, in 1904, 27,824, an increase of 1,079 per cent. Within the same period the number of teachers increased from 111 to 841, or 658 per cent; the annual expenditures from $161,084 to $2,922,648, an increase of 1,714 per cent; value of grounds, buildings, and equipment from $637,245 to $5,761,004, an increase of 804 per cent. Nor is this all. There are in addition five high school buildings in process of erection, the aggregate contract price of which is above $3,000,000.

THE FUTURE.

Now, let us turn our faces to the future. A careful inquiry, with no purpose but the ascertainment of the truth, seems to make it clear that the people of this State have not been remiss in setting up secondary schools; that in the number of schools and of pupils we are above the average; that the advance in numbers in the last decade has been as remarkable as gratifying; that with the exception of New York City these schools are evenly distributed over the territory and are fairly representative of the population of the State, and that in the city the evolution is now going forward as heroically and splendidly as it ever did anywhere. This is not saying that there is not room for more, or that what we have are not to be made stronger. We are to ascertain what will accomplish both of these ends.

We have been speaking of numbers rather than of excellence. There is no reason known to me for imputations upon the character of these schools. I should be surprised to learn, after all that has been said or done, of any proof that the average of buildings, of equipment, of teaching power, and of work accomplished was not high. Yet I have seen enough of school work to know that it often happens that people who have very indifferent schools think that they have the very best because no one does them the service of telling them the truth. It would not be surprising if there are many schools registered for but a part of the high school course which make the serious mistake of being more ambitious for a high-sounding name and for appearing to do a lot of work rather than for occupying a minor place, which is just as honorable, if they will do what they may do just as well as it can be done. A school which is giving a 48 count diploma in less than four years and with indifferent facilities should not be allowed to think that it is doing it as well as it may be done. There is nothing to be said against and there is much to be said for starting schools before they are able to do four full years' work, but there is everything to be said against a 50-cent piece having the effrontery to try to pass itself off for a dollar. * * *

Much would be accomplished if a movement to standardize the work of the secondary schools in all parts of this State, which is now under serious discussion, could be successful. And if that could be identified with the standard for admission to college established by the College Entrance Examination Board of the Middle States and Maryland the need of State universities in the Eastern States will be less urgent and logical than it otherwise will be, while the advantages to the colleges will be very considerable and the placing of more exact values upon the work of all secondary schools will be more stimulating and steadying than we can now foresee. * * *

Massachusetts makes, as she has always made, secondary schools compulsory by statute, though I am unaware how far the statute has been executed against a reluctant community. Not until recent years has the State appropriated State funds for the support of these schools. New York has required an elementary school of at least reasonable character within reach of every home. It has tried to assure the quality of the teaching by keeping in its own hands the certification of teachers while in our excellent sister State to the east that has been left to the same local authority which employed the teachers. After doing as much as that, and it has been very much, our State has left all the rest, including the secondary schools, to community initiative and local pride. We have stirred local initiative by favoring legislation, and we have done what reasonably might be done through the liberal distribution of State moneys to give education in every town and hamlet in the State the advantages which the stronger and wealthier communities owed to it. We have compelled in nothing save that there shall be a suitable building and a qualified teacher for a common elementary school. To that extent we expect to maintain a compulsion which compels. Beyond that we encourage and aid, and then give to every community the satisfaction which must flow from its own accomplishments.

Our plan has prevailed from the beginning of our educational history and it prevails nearly everywhere in the country. Under it we have as excellent schools, both primary and secondary, as we would have had under a more mandatory system of legislation, while we have an educational system which is altogether unique in its flexibility and adaptiveness to all local conditions as well as in the stimulus which gives to the intellectual self-activity of a community and to willing popular support because of free popular proprietorship.

Now and again it has been proposed that we shall adopt some compulsory policies which will assure the universality of the secondary schools. Any step in that direction would be necessarily disturbing in the affairs of a system now grown great and in my judgment would remove from it its finest flavor and the features which make for its best efficiency. It should not be done unless necessary, and the necessity is *not apparent. A secondary school* is not necessary to safe citizenship. It may or it

may not be necessary to the child's best chance in the world. That depends upon conditions. I can conceive of conditions in which compulsory attendance upon a secondary school might be what I would think an interference with the right of the parent and the best interest of the child. Whether or not that is conclusive of the question as one of policy, it is conclusive of it as one of principle. Going on just as we are we shall have secondary schools quite as universal as they can be useful, and wherever they are they will stir the pride and hold the affections of a people.

New York recently began in paying from the State treasury $20 per year for the tuition of each nonresident pupil attending an established high school, a policy which proves her intelligent interest in a great subject and may easily be the instrument of very great results. But it seems to me that this movement needs some guidance to the end that it may do the most good, indeed that it may do more good than harm. Very possibly the legislation has not yet reached its final form, and it needs generous and unselfish treatment to the end that its enduring state may be free from danger and full of good. I am confident you will agree with me in these propositions.

1. The point of this legislation is not to aid established high schools. That is done otherwise and very amply. If not sufficiently, the remedy is upon application alleging the fact and by legislation which avows the purpose.

2. The State has not intended to change its thoroughly established policy of only encouraging secondary instruction. It has not begun the policy of wholly providing such instruction without cost to pupils in districts without high schools. If it had, the logical result would be absolute State support of all high schools, which would be mistaken, if not absurd.

3. The point of this movement is to aid deserving pupils in nonhigh school districts, through equalizing to them the advantages which State appropriations now give to pupils in high school districts.

4. The State must not make it to the interest of a district without a high school to refrain from establishing one. It must not set up a policy which would develop great secondary schools, really small colleges, at central points by taking away the strength of existing schools in smaller places or at the cost of preventing additional schools.

5. The State ought not to put upon existing schools the burden of instructing nonresident pupils at much less than actual cost, and ought not to encourage boards and principals to do this, in the interest of the mere largeness or prominence of schools.

6. The movement should have in mind, not one interest as against another, but every educational interest of the State. It must aid the weaker district and the specially deserving youth. The new stream of financial support must be made to help the interests of secondary education, not where it needs no help, but where it really needs help, and most where it needs most help, and particularly to help boys and girls who will not get help without it. And it must be done so that the particular help afforded will not injure general or continuing interests.

Without any wholly confident judgment as to next steps in this connection, the foregoing propositions seem sound, and it is not certain that the existing legislation exactly squares with them. But time and discussion will point the way for us. We have never yet been unable to put an appropriation where it would do the most good, and we are not likely to be derelict now.

THE SECONDARY SCHOOLS AND THE CERTIFICATION OF TEACHERS.

The recent determination to accept the standings gained in the secondary schools for admission to the teaching profession affords an added reason, if any were needed, for universal interest in these schools, for giving the best attention to their affairs and for standardizing their work with the closest exactness. The fact illustrates, if it does not measure, the advantages of the educational unification movement in the State.

SECONDARY SCHOOLS AND DISTRICT SCHOOLS UNDER SAME SUPERVISION.

Let me add that I have been giving considerable thought to the interests of the country schools, and I am impressed with the belief, which I have heretofore expressed to the State Association of School Commissioners, that those schools would be much benefited if they and the union schools and the town secondary schools could be actually related to each other in the same supervisory district. A like advantage would accrue to the higher schools.

I am not unaware that under the law they are commonly in the same supervisory district now. But it is more a legal fiction than an actual fact. The manner in which school commissioners are chosen and the entire absence of statutory requirements or accepted understanding as to qualifications, results in the election of many commissioners who have aptness for public affairs, but who can not be actually accepted as superintendents of the technical affairs of the larger and higher schools. To say that this is always so would of course be unjust, but that it is widely so will not be denied. I shall be wholly within the limits of truth if I go further and add that in many a whole county taken together there is no actual supervision of the rural schools, and we all know well enough that schools are not likely to get on as well without it as with it.

The fact that it would be impossible of success if there were not an even stronger reason, as there is, is enough to make any movement to abolish the district system uninviting. It is hardly worth while to entertain ourselves with things that can not be done or ought not to be done. But a movement to relate the secondary schools with the elementary schools in a unit of supervision which is small enough to make supervision possible, and under a superintendent who can superintend the largest and the highest as well as the smallest and the weakest to their advantage, is possible of attainment and would be beneficent in its consequences.

Kindly give this matter the benefit of your reflections, as it may quite possibly be a subject of future discussion.

TRAINING TEACHERS FOR SECONDARY SCHOOLS.

The unprecedented growth of our secondary schools has created a demand for teachers of advanced work which it has been difficult to meet. The graduations from college are more than ever before, but high schools want a large proportion of men teachers, and the number of thoroughly prepared men who want to teach is small. Boys who have been taught by women all through the elementary grades must at least hear a masculine voice and get things from a man's point of view by the time they get into the high school.

But the difficulty is rather deeper than that not many men incline to teaching. The work of the colleges does not incline them. Other callings seem more inviting, and the colleges do but little by way of corrective. The colleges do not take much stock in educational theory about the professional training of teachers. College managements are more worldly wise than they used to be, so they nod to this theory in a polite way rather than lose any practical advantage which might result from ignoring it. But such interest as most of them take in it comes from prudence rather than conviction. And it must be admitted that when a university does establish a separate department upon the theory that education is a science and teaching a profession, unless it makes a separate school with considerable autonomy of its own, it finds difficulty in securing professors who can justify the theory and stir the efforts of ambitious men students. Yet you and I know that one can hardly hope to become a successful teacher without deep study of educational history, theory, and practice.

But if one can not teach without knowing how to teach, he surely can not teach without knowing the subject he is to teach. The courses in the State normal schools

(excepting the State Normal College) are not broad enough in subject-matter to prepare for teaching in the secondary schools, and it seems to me can not be made so without an unwarrantable expense and the probability of lessening the attendance and withdrawing their direct and imperative aid to the elementary schools.

Now, I have no doubt about the need of college-bred men and women, with a good proportion of men, who have been prepared to teach, for the work of the secondary schools. We are not getting a sufficient supply. There is a hiatus in the educational system. The academies have rather the better of this because of their independent self-control, because of their somewhat greater exclusiveness, and because of their closer college connections. The high schools are suffering. It is time to do something, and the something might as well be decisive. Why not set a date when no teacher without an approved college degree shall be newly appointed in any secondary school while the school shares in State appropriations?

This would help the high schools most decisively. And it would do much more. It would help the colleges to a really serious appreciation of their responsibility for the plane of work in the secondary schools, and it would accentuate and vitalize the college influence in the educational system and in all the intellectual life of the State.

This State has been splendidly aggressive in uplifting the learned professions. It is no reflection upon any other work of recent years in the regents' office to say that the best things done have been the development of additional secondary schools and the closing of the doors to the learned professions against persons who are not learned. Not one whit of anything accomplished is to be lost. All we have gained we are to hold, and more. There is to be no slacking of the pace. But let us be specific. In view of the high ground gained for all of the other professions it ought not to be difficult to do as much for the teaching profession. It is an absurdity to protect the other professions and neglect the most important teaching positions. The truth is we are, relatively speaking, protecting against incompetency in the elementary schools, even the little ones at the crossroads, more than in the highest and largest schools we have, if I except certain cities where special or local laws apply.

The educational system must balance. The work in the upper schools is the hope of all the schools below them. There must be universal recognition of the worth of scholarship—not merely of its form or its pretensions, but of its juices and its flavor and of its power to apply itself to the real concerns of life. Where shall this be if not in the schools? Surely where, if not in the policies of an ambitious State system of education?

It will be unfair to accept this as a general imputation against the teachers of our middle schools. They have met the demands of their day. They have carried us over a transition period in the evolution of a great system. They are in most cases better prepared to serve us still than other or younger teachers can be. No criticism upon them and nothing but compliment for them is intended. They brought all that they could get into their work and it was much. They have supplemented it with experience and study. Nothing more could be asked of them. Nothing shall be done which could reflect upon them now. But we are facing new conditions and a new outlook. We must provide for an opening era. And we must make that era as great as we can through the sagacity of our plans and the abundance and forehandedness of our provision for it.

CONCLUSION.

I must thank you for your patience, as I do very warmly, and speak my concluding word. The educational territory between the elementary schools and the colleges has come to be well occupied, and it will be as completely occupied as it is possible for occupancy to serve the ends of a free people. This educational territory is historic—as engaging as the middle ground which stretches through the valleys of the Hudson and the Mohawk is enticing in the fascinating story of the Revolution. Upon this ground educational exclusiveness has met the democratic intellectual advance and

been overwhelmed by it. Private schools will continue to command endowments of money and zeal and faith, and probably more liberal ones than heretofore; they will continue to serve constituents who prefer some educational exclusiveness, and they shall have our fellowship and support in the doing of it. But by far the greater number, and all supported by taxation, will train for life as well as for college, will express the purposes of the multitude, and be aligned with the people's system of common schools. Upon that point the summing up is finished and the verdict is in. So far as conditions give rise to the demand the doors of the secondary schools will have to swing free to all the children of the State. The common schools are going higher. A universal system of free education is coalescing. The spectacle is inspiring. The readjustments may take time, but when realized they will be potential because voluntary, energizing and uplifting because the natural product of a free people's thinking.

CHAPTER X.

ART EDUCATION AN IMPORTANT FACTOR IN INDUSTRIAL DEVELOPMENT.

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SYNOPSIS OF CONTENTS.—The natural method of communicating truth is by pictorial representation—Influence of beautiful surroundings in childhood—Art is for all the people—To elevate them it should be applied to all the products of industry—In turn artistic work ennobles the workman—Extension of art museum work the most promising agency for art education—Methods—Popular misconception as to what is implied in the word "art"—Extension work of the St. Louis School and Museum—Courses for public school teachers—Utilization of the library a necessary part of the work—Instruction of workingmen—Types and classes of art educational institutions and agencies—Examples—Development of the St. Louis School of Fine Arts—Difficulties encountered in promoting any extensive art movement—Articles in common use should possess qualities of beauty—Aims and work of William Morris—The epoch-marking lecture of Cardinal Wiseman—Effect of our industrial evolution upon art—Art an essential factor in industrial development—Instances of France, Germany, etc.—What the art movement in Great Britain has accomplished—Educational influences of the Chicago and St. Louis expositions.

The purpose of this article is to set forth an idea of what art in our country may and, as the writer believes, should rightly be, and how far it has already entered into the lives of our people, and to bring together for the consideration of practical men some of the more practical suggestions for the advancement of art education. Without much regard for any literary object, the writer has written down what he has thought might be useful. No doubt the reader may find ideas or even language that he recognizes as old, and possibly put forward in a manner as though original. At the end of nearly forty years of work in art education, however, the writer finds himself using, possibly with new applications, the same old arguments used thirty or more years ago and so often since that they seem as much a part of himself as the hand with which he writes these words. It is gratifying to find these ideas received with more interest than was formerly the case, but even yet they do not seem to have become so generally accepted as to be justly counted among the platitudes.

As one notes the gradual change of view on the part of the public as to the value of art education, one calls to mind lines written by Tourgenieff at the head of one of his famous hunting stories: "I now love those things I once burned; I now burn those things I once loved."

The place of art as a constructive influence in the development of civilization, its value in the general education of the people, the important relation which it is to hold as a broadening factor in our lives, are beginning to be recognized. It is even becoming known that to surround the young from their earliest days with the pictured records of the best inspiration and thought that have come down to us from the golden ages of the world's art is the most certain way to implant in their minds true knowledge as to the grandeur of a commanding people or period or an understanding of the great lessons *in the history* of the onward struggle of mankind.

A reality in liberal education, no less vital in higher study than in the kindergarten, where it has been better recognized, pushing itself upon the attention of educators in every field—though seemingly obvious enough to be axiomatic, is that truth absorbed through unforced natural functions, by unspurred, free operation of the senses, is much more deeply and naturally absorbed than that forced upon the mind through prodded and studious effort to digest fact. In pictures nature talks to the mind of man, in the mind's own language, which she has given it; for pictures within mental impressions, whether developed and formal, or realistic, constitute the natural means of communication between man's inner being and the universe without, and on picture impressions, undoubtedly, the mind relies for all its records of fact; it is so that we are formed. Whether directly conveyed through the senses or laboriously constructed in the brain, all our knowledge is recorded and saved to us in mental pictures. Environment, always teaching, always questioning and answering questions, in an endless chain of pictures, is the preceptor provided by nature for man. Through this instrumentality she cuts short in her teaching the devious methods of logic and rule, presenting the truth in pictures that epitomize results and go straight home. It is now coming to be recognized that we can best supplement nature by developing the natural system rather than by substituting one artificial in character; and in education we depend more and more upon pictorial art. The mind jumps forward to recognize pictured truth. Our greatest orators are those who most effectively suggest pictures to those who listen. It is not without a deep lesson for us as educators that pictorial representations, whether on paper, wood, or stone, hewn with knives or laid on with pigment, are, as they have been since earliest history, the one form of communication universally, immediately, understood by the human mind. The cause of this power of pictorial representation to impress the mind is eloquently suggested in the profound injunction of Emerson: "Teach the children; it is painting in fresco."

Early impressions from beautiful surroundings become as the artist's colors in fresco painting, inherent in the substance. As the fresco color permeates the plaster upon which it is laid so that though the hand of the iconoclast may cover it over crudely, yet after centuries have passed the pure and truthful tints of the master are there awaiting but the sympathetic touch of the restorer to bring forth their rich and varied beauty, just so the surroundings of a child, beautiful and ennobling or the contrary, enter into it and become a part of its nature and remain there all through life, to give the possessor clearer, wider vision, fuller and finer life or the contrary.

The power to perceive beauty is one of the highest endowments of man. Who, then, will deny the wisdom of cultivating that power in all the people? Can there, indeed, be a higher ministry of good than to spread abroad that knowledge by which the eye that sees not the thing of beauty may be made to see it—the knowledge through which refinement of taste, or even the divine power of creating, may be inspired in minds and hearts filled elsewise only with the sordid, material cares of life? Blessed is the man who learns in his youth what art is, for in art is the power of expressing all sentiment and beauty and the divinely gifted genius that interprets wisdom. Fortunate they who in the early, impressionable years of life are surrounded by influences, however simple, that weave into their natures love of the beautiful, for it is a heritage to prove a godsend in later years. If after successful battle with the material world such a one acquire the needed thing to retire on, in this heritage will be something to retire to and to retire for—an estate of the mind and spirit; or if to some fortune bring but a cramping struggle for food and shelter or worldly gain, then this heritage of the love of beauty shall be to them an inner temple, where they may take refuge and worship, apart from the soul-destroying influences of sordid strife, and whence they may come refreshed and enheartened by communing with ideality and truth.

I wish that in providing for the future our school boards might realize what a large *influence for good can be attained* by surrounding the child with an environment

of beautiful things. If in every contract for a school building it were stipulated that a tenth of the cost should be expended for wall decorations and pictures and sculptures in the class rooms, what a wonderfully inspiring and ennobling influence would be created in those study homes of the children, to mold the character of the future citizens who are to control the destinies of our country.

If those in control of our art museums might realize what good would result from such a popularization of their work as would bring the ennobling influences of art into the lives of all the people, how much greater they would be than in their competition for the privilege of storing away old masters.

Evidence of the good influences and the quick appreciation which must follow such action by a governing board is seen, for instance, at the Congressional Library, in a notable illustration of the eagerness of the people to take advantage of the few art opportunities properly placed before them. Much larger numbers of admiring visitors now throng the beautifully decorated Library hall than visit the adjacent building of the National Capitol, so long the chief goal of American tourists, and this, undisputedly, because the Library construction board had a small per cent of the cost set aside for decorative purposes. The numerous panels filled with the work of our mural painters, the impressive examples of American sculpture, draw and retain the interest of many thousands of visitors, who devote instructive hours to studying them. Moreover, the same stroke which so happily creates this splendid popular educational influence for the awakening of a national art appreciation at the same time directly encourages the development of American artists in a most effective way, through the increase of discriminating and instructed demand. Surely no stronger evidence than this result could be asked for. Similar is the lesson given by the Boston Public Library, where the artistic decorations by Sargent, Puvis de Chavannes, and Abbey attract thousands of people, who receive from the interpretations of these great men much stronger and more direct impressions than from the printed records of the library.

There is also this great truth: That even a little study of nature through art opens the eyes to all manner of truths, increasing the power of observation—the habit of seeing. It is interesting that in the greatest governmental secret-service organization of the world very great stress is laid upon ability to draw as essential for the development of that power to observe and remember, upon which in such a calling so much depends. Art is not for the professional worker alone, but for all the people in all their work, in a large and generous way. There is valuable truth in the saying "What we fail to see in the world might as well not exist, for it means nothing to us." In teaching the child to draw, we but show him how to see. Whatever broadens the vision of the child lays the foundation for a broader citizenship. No great art nor literature nor statesmanship can we have until they come from the people. Knowledge and appreciation on the part of the multitude are required to create that universal sentiment that culminates in the individual work of a master hand. The great painter, the great writer, actor, sculptor, statesman, or architect, consummating the instinctive efforts of generations, giving in his life the consensus of feeling of a whole people, and so enriching the world with a triumphant chapter in the story of mankind, may be brought to us through the simple influence of allowing the children to become imbued with the knowledge of beauty, to absorb from their surroundings a natural comprehension of truth in form and word.

To one who has paid the slightest attention to art matters in our country during the past few years it is very apparent that the growth of a love for art among the wealthier classes has been marked and rapid. The man of wealth now looks upon the possession of fine pictures, arranged in the rooms of his house or in a gallery set apart for his collection, as the proper thing to indulge in, and this is doing good.

The greater field of work, that of applying art to the products of industry, has until quite recently received little attention. Much has been said and written of art edu-

cation and its influence on the products of industry, but very little has been done toward carrying out the various theories advanced. When we look for results, we find that the institutions doing systematic work in this direction may be numbered upon the fingers of one hand. Yet art education, properly understood, is not alone for the development of talents that shall contribute to harmonize the feelings and enhance the enjoyment of the small class of people possessing inherited wealth with which to indulge in the soothing influence of artistic symphonies. Rather it will give to thousands of future workmen knowledge and aptitude which they will use to increase the value of their work, enabling them to contribute more to the wealth of the world and get larger prices for products of their labor, through the influence of its power to advance individual or local interests wherever it is best appreciated, but more than all it will contribute to the elevating and perfecting of American industries as a whole and to the enrichment of the life and the aspirations of the whole people.

Wherever in the history of the past we have found a people or individuals who have grown great in art, we have found them pursuing their work as if imbued with the spirit of the artist workman as well as the artist designer; that where the one ceases and the other begins we can not decide. As Cardinal Wiseman has expressed it, "Thus we find art and industry hand in hand, stimulating and supporting each other." To bring about this helpful relation between art and industry, through the medium of our schools and museums, to take advantage of every opportunity to spread a knowledge of art in every way that will lead to the national development of artistic feeling, is a necessity to our country. This means that we must look to the applied arts and develop the application of artistic knowledge in industrial callings. We must take carpenters, blacksmiths, plasterers, woodworkers of various kinds, stonecutters, and others, as our work extends, and make each individual a better worker in his legitimate occupation by infusing into him a feeling which will lead him to develop ambition and do better work, by showing him the best that has been done and teaching him to excel by making him master of his calling; in short, by inculcating in him the principles and training so splendidly taught and exemplified in the life and work of the late William Morris, that sturdy Englishman with the courage of his convictions, who, though a man of great wealth, mastered six different trades, that he might the better understand the needs of the working people of his country.

In seeking to enrich the mind of the workman with a knowledge of what can practically be done in his particular art, whether it be the art of the cabinetmaker, machinist, iron worker, printer, or potter, our object should be to increase the man's practical working ability so that he may do better work in his everyday calling. We want him not to paint pictures or model statues, but to be at his legitimate work a better and more ideal workman, therefore a more valuable citizen. We would teach him perfecting of workmanship and improvement of industrial productions, because without the refinement of art all work is crude, because if the workman makes an object not crude nor ugly he does so through knowing something of art, even though only instinctively. In the period long ago when workmen were conscientiously taught and the guilds maintained high standards of journeymanship objects of common usage, made even with the crude tools of their day, were beautiful in form and workmanship, so that we treasure them in our museums and private collections not merely as mementos of ancient times, but as beautiful things possessing a quality which we love, unfound in the things we commonly make and use to-day. We are sure that the workingman of to-day, properly educated and trained, could do better work than was done by the workers in the time of the guilds, because when we have supplied his deficiencies his power will be far greater than theirs. The aim, therefore, of our most advanced art teaching is to see to it that our modern workmen excel. If it be true, as surely it is, without any exception, that every normal person prefers between two articles of household utility, equally suited for their mechanical purpose, the one which is beautiful rather than the one which is ugly, then we all want art, and in spreading the knowl-

edge of how to produce it everywhere in all its varied forms will be fulfilled a desire as universal as it is worthy and aspiring.

Let us all clearly comprehend also that the professional artist who is to do us good and whom we desire to produce is not to be a recluse or a man apart, but that his vocation has been extended as greatly as has that of the scholar in science and that his place is in the activities of life, commercial as well as professional—his sphere coincident with the whole scope of our municipal and national life—while in the proportion in which he touches all sorts and conditions of men and all phases of men's lives will he, if true to the traditions of his calling, elevate the lives and the souls of all men and all communities.

With this broad and true understanding of art as our working ideal and motive in educational effort, how inclusive our work and how, as rapidly as our art institutions are enabled to increase their activities through financial growth, they must occupy a broader and broader field.

In view of this, the extension of art museum work into fields wider than those which have perhaps served the purposes of the past is the branch of art educational development which promises most for the future. To bring to bear upon our people the strongest and most direct influences possible for the advancement of art appreciation we must link the educational possibilities of the art school with those of the museum and amplify and extend their activities so far that not only our art students, but the great mass of people who now seem indifferent, shall be brought within the brightening influence.

It is not so much in the mere production of pictures or statuary or in the beautifying of the homes of the wealthy, but in the direct results that may be obtained for the improvement of the people, that the great value of art educational effort lies. We may hope that there is room enough with us for the movement which in other countries in our time has developed a taste for and knowledge of art among the peoples and wrought such changes as those which accompanied the great revival of art in Italy.

The great art museum must, then, be far more than an architectural pile containing showrooms where curios and masterpieces, real or alleged, are placed upon exhibition, and yet this is not so far from the popular conception based upon what our museums have represented in the minds of the people. The true art museum exists primarily for the double purpose of spreading the knowledge, appreciation, and enjoyment of art and of inspiring its production, first through inculcating popular understanding of artistic truth, then in a more specialized way, through providing bases for comparison, standard of accomplishment, source of inspiration for artists and art students and all manner of workers who can be influenced to apply art in the beautification of their daily productions. With so wide an aim, the art museum is in its nature, even though that nature be not fulfilled, a university—a great center of propulsive education—from which enlightenment concerning art is to be transmitted in all manner of ways to every nook and corner of the territory which it serves, and to every human being who can be reached by its influence. If this, as covering a work broader than our museums have actually engaged upon, seems the definition of an ideal rather than an immediately practicable institution, yet at least I believe it not only suggests the art museum of the future, but also the direction in which our museums are moving to-day.

To carry out the plan upon such broad lines of activity, the museum must work in many ways. Visitors who seek the museum for purposes of study must be effectively assisted to enjoy and understand the works on exhibition, and through lectures delivered in the galleries must be educated in a general understanding of art. Students must be provided with competent teachers who can lead them wisely in efforts to develop their artistic capabilities, and, in conjunction with the exhibition galleries where in permanent and temporary collections exemplifications may be studied, must be class rooms where students and technical workers may consider in detail books of reference, methods of technique, and objects of art work with a degree of intimacy not

possible in a public gallery. Intimate relationship must be maintained between library, lecture rooms, and museum collections. Methods for extending the active practical work beyond the walls of the building into the public schools and institutions and the homes of the people must be added. It would seem that it should be unnecessary to dwell upon the fact that the bringing together of rare examples of art and their installation in galleries and the admitting of visitors to them are not all that is required to enlighten the people as to the proper utilization and enjoyment of art and as to how it may be applied to their advantage. The proper installation of well-chosen objects, upon which reliance has chiefly rested for enhancing the influence of our museums, is indeed necessary to successful study, yet adequate provisions for widely extending the educational utilization of the collections are no less important. Indeed, if during the last twenty-five years there had been put forth as great an effort by museum managements in the United States to teach all the people how to utilize museum collections as has been put into the accumulation of endowments and rare works of art, we as a people would be much further advanced in art than we are to-day.

Efforts to extend the usefulness of our art museums and schools have in the past been somewhat handicapped by a narrow misconception on the part of many as to the meaning of the word "art" affixed to the titles of these institutions, the breadth of it having failed to be generally appreciated. Many, even among art workers, have had a narrow idea of the aims and purposes of art education, while among the general public, unfortunately, a lack of understanding of or sympathy with or even an antagonism toward art or anything which goes by that name is a factor, in part as a survival from the days when our people were too busily engaged in breaking the soil and developing the resources of the country to find time for the refinements of life; but more as an outgrowth exemplifying the evil that must justly be charged against the influences that have tended to alienate art from industry and to make it a thing apart from ordinary life. Thinking people are now rapidly coming to understand something of what art in our lives might really be; and as they get to see what art education means and what results it produces all these prejudices disappear and a broader activity, entering into the lives of the people, is demanded from art institutions. Even to-day, too many who hear the phrases "art school" or "art instruction" picture to themselves a place where young men and young women follow, in a dilettante sort of way, a course of study requiring very little thought, in an occupation the knack of which is acquired by some other means than a studious mental process. To such a person, who supposes an art school to be a place where pretty things alone are turned out, it is news to be told that he walks about clad in apparel that has been first subjected to the judgment of an experienced draftsman, sits before a stove or grate that has passed through the hands of a designer, whose experience and skill in drawing and modeling have been perfected by means of study in an art school; that the coal burner—a new design composed of iron and tile—before which he pauses for a moment is the result of an architect's study among old Dutch stoves in a European museum. Perhaps he does see, in a vague sort of way, a certain degree of beauty in a piece of forged, foliated ironwork based on an example of Flemish handicraft of the fifteenth century that is kept in a museum and worth, through great beauty of form, its weight in silver; and perhaps, as he leans back in his arm chair, after his business for the day is over, he wonders why it is that that ornate piece of furniture does not seem so easy as the queer, simple-looking chair that his friend Jones has in his study. Perhaps, too, as he opens his eyes in the morning and lets them rest for a moment on the gorgeous pressed ornaments, made of sawdust, blood, and molasses, that decorate the furniture of his sleeping room, and tries to make out why it is that they have not that indescribable air of refinement that they had when he first purchased them; and if so, our friend is beginning to be conscious of certain subtle differences that exist between things. The influence of the old Dutch stove, the ancient bit of furniture, and the foliated ironwork stored in the European museum he has visited, has begun to be felt by him. Soon will come a

time when he will acknowledge that he sees the beauty of these things. Yet the idea that they are in any way connected with art schools or art instruction or art manufacture may not without a deal of trouble be forced upon his mind. Art and all that sort of thing to him mean pictures.

As an incident of our development, art at the present time in this country, it is curious to note, affords a perfect paradise for a certain type of persons, who, by hanging on to the skirts of "æsthetics," secure in its incomprehensibility to the people they come in contact with, obtain for themselves a recognition that would be beyond them in any other sphere of activity. Unlike other businesses or professions, that of art, it seems, may be taken up by those indisposed for other occupation with that confidence born sometimes of innocence. It would seem even that there are those who deem preliminary, to say nothing of thorough, knowledge quite unnecessary to persons who adopt the profession of art teachers.

A few evenings spent in reading, collecting, and storing the mind with such terms as the "principles of harmony," "truth," "beauty," and the "eternal laws of nature," and all this may, by a little skill or ingenuity, be introduced in conversation, and the majority of people having never studied such subjects are not sufficiently educated to see how supremely ludicrous the whole business is.

Is not all this lack of comprehension of art to a great extent the fault of many of our so-called art schools? In a large measure it most certainly seems so to me. Faulty and incomplete courses of training, abetted by a sense of apartness which holds the public aloof and which is fostered by false academic conceptions and ideals, furnish most of the explanation. In the main, our schools have ignored or failed to bring within their sphere the broad and liberal application of art; and in this they have slighted the applied arts, looked down upon the craftsman, neglected design, made technique their god. They have trained a multitude of eager students to only paint pictures that few men want and fewer buy, and have elaborately equipped the great majority of those who flock to them for instruction to lead lives of want and uselessness. It was not so in the days of the Renaissance. It is not so in countries where art is broadly and properly taught, and it ought not to be so here. With the crying need for reform the present conditions can not last and the remedy will be applied.

What is needed is not so much more art schools as more art in our common schools. One of the faults of our art educational work is in not beginning its influence early enough in the training of our people. We can have no real foundation for art appreciation until one generation of school children shall have had a course of art instruction, continued from the day of beginning work in a kindergarten until graduating from the grammar or high school. Such a course of instruction should consist not alone in drawing lessons, and not mainly so, but include study of the artistic treatment of form in various phases. A chief instrumentality in this work must be the art museum, properly organized to that end, which should not merely supplement but inspire the class-room study. It is not necessary that laymen shall be trained as artists should be trained, nor desirable; but it will be a great source of happiness and of prosperity to our people when the education which should be the birthright of all includes the appreciation of beauty and develops in some degree the power to produce it.

An excellent form of museum-extension work was inaugurated by the St. Louis School and Museum twenty-eight years ago in the establishment of a system of circulating collections composed of reproductions of masterpieces, through which the opportunity to study art was placed before thousands who could not very well travel to the museum, as well as before many whose observations in the museum galleries were supplemented in a manner to make them much more valuable and to impress them upon the minds of the people. Next to lectures in the galleries of the art museum itself, illustrated by the exhibits, lectures given in the halls where these traveling

collections were hung have seemed to impress the listeners. The stereopticon may be employed to supply further illustration, but its views are necessarily fleeting and seldom more than approximate the beauty of texture or interpretation of color values attained by the splendid reproductions at our service to-day. In the school rooms and halls where these lectures are given the visitors gather around the objects and study them, selecting the ones which most appeal to their interest, to which they may give special and detailed consideration. In 1878 a large collection of several hundred autotype reproductions from the world's masterpieces was obtained from the firm of Adolph Braun & Co., of Dornach, Switzerland. These works were divided into sets of 50 and of 100. To each example was affixed a tablet giving the name of the artist, his school, the title of the picture, the gallery where the original is hung, and reference to the text-books, where information in detail might be found. These collections were freely circulated for years throughout the West in public schools and for the use of art societies. They have also been used extensively in the high and grammar schools of St. Louis.

With such a collection as this it is easy to trace the historical development of pictorial art and make its various periods understood, even to comparatively young scholars. We may begin with illustrations of severe and impressive works in mosaic and fresco, which can not be styled imitations of nature, but are rather conventional diagrams, a phase of work characteristic of the earliest form of Italian art. From this we are by degrees lead to a more perfect art, where we find everything broad, simple, severe, and ideal; where the artist has not stooped to excess of detail, his use of color has not interfered with clearness of form by an obtrusive brilliancy, and the shadows are shown just sufficiently strong in contrast to display the forms and make the lights luminous without interfering with the uniformity of the whole composition—a period to which belongs the work of Raphael, Michel Angelo, and Da Vinci. From these types we naturally pass to others, reaching the Venetians, the illustrations of whose work embody as many of these great qualities of art as they in their different natures found adapted to their feelings. We see how with them the light, which had been in the hands of the Florentines broad, flooding the whole work, became narrowed and more intense, but was not carried to an extent that destroyed the decorative distribution of the parts of the composition, and how, though brilliant, transparent, and gorgeous in color, the art was large. The illustrations here show the work of the Venetian masters, Tintoretto and Veronese, Titian, and others.

And so we may descend through the history of these various periods of art, step by step, in regular succession. Not only in pictorial art, but in architecture, we may descend through the same scale, from simplicity, breadth, and largeness of style to complexity, detail, realism, and finish, and see, in the reproductions, how the architect in too many cases has ceased to be an artist, and worked only as the constructive engineer—leaving the artistic treatment of the surface to subordinates and losing in the process that decorative unity that characterizes the structure created by the architect when he has been actuated by the feeling and inspiration of the true artist designer. Complex as this may seem, it is possible to illustrate to school children the developments outlined above by the use of illustrations easily obtainable. All will recognize the additional charm that such a series of illustrations would give to the study of history and allied subjects.

Perhaps the best illustration of the practicability of an effort to make, in such a manner, a good working reference collection for public high school work is shown as the result of the generous efforts of a committee of ladies of Chicago, who assembled from the publishing houses of the world several hundreds of reproductions showing the architecture, sculpture, and pictorial art of nearly every country where art has been recognized as a factor in the lives of the people. This collection represented a considerable outlay, and served as a memorial to an honored citizen in the high school which bears his name. It comprises not only reproductions of works of art, but has also

pictorial representations of the occupations and characteristic scenes from the life of different European peoples for educational comparison. Nearly all of these latter works are color prints, selected with due regard to the artistic value in their execution. Such collections might well be considered necessary to the proper equipment of every public school system in our country. Redividing and interchanging the collections between different schools from time to time will enable even a small investment to do great good.

The many directions in which traveling art collections of various kinds may be utilized to great advantage open up a most promising field of education. This work can not fail to have a pronounced influence upon the future of American art.

Another work that has resulted in great good has been the service which certain art museums and schools have been able to render to the teachers of public schools. The greatest liberality has been shown by some institutions, more particularly in the western cities, in dealing with public school interests. Special Saturday and holiday classes have been arranged for the benefit of teachers and their pupils, special collections installed with a view to their requirements, and appreciation of the possibilities of this branch of museum work shown in several instances. The children's museum of the Brooklyn Institute of Arts and Sciences affords a notable illustration. The St. Louis Museum and School has planned and probably will soon inaugurate extensive work in this direction. For instance, special courses of instruction for teachers will be given to enable them in turn to instruct their pupils, using their own language and suiting it to the children's minds and making full use of the collections.

Free utilization of the library in conjunction with art collections is a necessary part of museum educational work. Quite as important that the artist should cultivate his mind as his hand. The results of a want of education are painfully apparent in many works to be seen any year on the walls of our exhibition galleries, where the educated and intelligent man may be recognized at once by his work, and, for that matter, the ignorant also. An artist of great talent or of genius always produces results that charm us with masterly qualities—handling of color or vigor of style. Even yet, if his mind be not cultivated through a good general education and a knowledge of what others have done before him in his chosen profession, his breadth of vision, his range of subjects, must be limited. No art museum can be said to accomplish its full work until, through its installation of objects and organization of facilities, it shall at the same time command the respect of the educated and refined worker and lead all classes of students, both the expert and the untrained mental worker—mechanic, craftsman, or whatever he or she may be—by natural and direct paths to the acquisition of the knowledge required on those subjects connected with art which may be unfolded in study of either books or objects. In this direction the writer has found it possible to accomplish good results by reversing the order of procedure usual in the use of books and art works. Eighteen years ago he was thrown somewhat intimately with a large number of mechanics—men who represented a score or more of trades, in the pursuit of which a knowledge of drawing, color, and form in historic styles of ornament would prove of practical value. It was observed that these men had great difficulty in using to advantage books of reference to aid them in their work, so that it became necessary that the librarian or assistant should familiarize himself with the subjects and locate book, chapter, and page for the use of the student workmen. It was observed, however, that in nearly every case the workman was familiar with the pictured subject, and this knowledge was built upon to the extent of creating a picture index in the museum, which served admirably as a guide to the information in the books of the adjacent library. The ready convenience of this system made it of the greatest utility and time-saving value to all classes seeking to supplement with the information in the library the lesson conveyed to the eye by the object exhibited in the gallery.

The working *value of such* a plan, to make the object itself serve as an index to its

literature, was tested in a collection of several hundred illustrations representing a large number of selected famous structures comprising the best examples of Renaissance architecture in northern Italy and southern Germany. The plates were sufficiently large to present the ornamental details of the structures. They were arranged in groups of ten or twelve each, the plate best showing the building as a whole forming the center of the group, and arranged about this other plates showing different parts of the building, juxtaposing either the central or more remote parts in the picture, as seemed suitable. Each plate bore an inscription giving the name of the work, the period and location of its designer, his birthplace, age, and school, together with the designation of the library cases, the volumes, chapters, and pages where information could be found in regard to the building, its parts, period, architect, and artist artisans engaged upon it. The facility with which working people made use of this means of reference was as surprising as it was gratifying. This same idea might be utilized in the installation and labeling of other and various sorts of museum collections.

Special lectures and classes for workingmen constitute another interesting and advantageous sphere of work through which the development of popular art appreciation may be greatly advanced. Class lectures which have been given to mechanics on Sunday mornings in the galleries of the St. Louis Museum, the objects of applied arts being used for illustration, have been well attended and influential in improving local standards of workmanship in certain directions—notably in wrought-iron work.

There is nothing so very new in these lines of art educational activity. They are all suggested by the great English system having a head at South Kensington, in that museum which has so world-wide a reputation. Fifty years ago a few men saw the need of doing something toward general art educational work, and their efforts have grown to an extent that has strongly influenced half the countries of Europe. France turned a listening ear to the teachings of England in this direction, and, with that promptness which denotes a progressive people, established similar work. In Berlin, at the Royal Museum, collections were brought together for the same purpose, and then the Kunstgewerbe museums took up the work throughout Germany. Belgium, Switzerland, and Holland have cultivated this influence with great intensity, and have reaped a splendid reward.

A function of an art museum in any country, second in value only to its part in the universal spreading of art appreciation, is to aid in developing a national artistic conscience, the conscience of a national motive or inspiration in art—an art message for the world. Our American art students must study the Old World schools of expression; but if we are to develop a national art, an American art, they should also see and study what has been conveyed by the American artists who have gone before them, or who are working with them side by side and feel the American influence. This requires American art museums as well as art museums in America. A common criticism by European visitors to American museums is that American art, which more and more attracts the attention of the world, is inadequately shown. Too often have our museums been tempted to expend their substance upon "old masters" that have happened to be obtainable, not always the best examples, while they have neglected an art of growing importance at home. The educational value of carefully chosen examples of the great artists and instructive schools of the world, of course, should be not overlooked by art museums; yet there is much to learn in the struggles and victories of American art, even quite independently of what national message may be found in it.

Two widely separated types of art educational institutions for technical training have grown up in our country during the last hundred years. The first to be developed was the regular academic type, where instruction is based upon the supposition that all students are to select as a life work one of the two distinct art professions, painting or sculpture. Recently architecture has been added to one of these original institutions.

Historically preeminent among the stronger of such schools, and I believe the only two of this type which have existed continuously from their foundation, are the Pennsylvania Academy of the Fine Arts and the National Academy of Design of New York. The title of the latter might lead one to suppose it a national institution, though in reality as an art school it has always until the present reorganization been a local institution. Within the last twelve months, however, the School of the National Academy of Design has greatly changed and liberalized its course of instruction and sphere of activity in uniting with the Society of American Artists and organizing its school as a department of Columbia University, absorbing the school of architecture of that institution, and becoming affiliated through it with the Metropolitan Museum of Art, which also takes part in the great merging of art educational work.

The Philadelphia school, the Pennsylvania Academy of the Fine Arts, like the New York Academy of Design, has been almost fully confined in its curriculum to the training of men intended for the two professions of painting and sculpture.

Similar schools have been organized from time to time in different parts of our country, which have led precarious existences for varying periods of activity, and in each case from lack of adequate support have died a natural death.

Of later development, and indeed yet in course of evolution, is the type of art educational institution which seeks to deal with art in its wider applications and broader influences, with wide-spread development of art appreciation and art utilization in view as well as the attainment of high ideals in artistic representation. That this is the type of the future is indicated by many signs, not the least encouraging of which is the recent broadening of the old New York Academic School, which was found necessary to bring it into harmony with the times.

Added to the technical art schools spreading a knowledge among our people are our art museums, and temporary exhibitions, collections, societies, and organizations (including civic, State, and national associations and clubs for the encouragement of art study), and publications engaged in art educational work, as also art classes and departments in schools which include some art training as part of a liberal or technical curriculum—thus the engineering schools and institutes of technology, specializing in branches of drawing and design, and the many public and private schools giving elementary art training. The various art institutions through the influence of which artistic activities of educational value in our country are advanced may be classified under five heads:

1. Museums or galleries of art apart from art schools, i. e., those institutions whose purpose is the acquisition and display of works of art for the benefit of visitors who are privileged to study such works under the ordinary regulations which govern such institutions the world over.

The functions of these museums or galleries consist in the arranging and presentation before visitors of collections of beautiful objects of art in a manner to give them the full value of their artistic worth so far as perfect installation can contribute to such an end. The æsthetic influence of these collections in themselves is considered of sufficient value to justify their maintenance. Under this head should be classed the vast number of private collections, installed in the residences of owners or in specially constructed galleries as a part of such homes; in each case such collections are quasi public property, as the generosity of the owner usually makes it possible for the public to visit the collections, often permitting class lectures and lessons to be conducted—using the exhibits for purposes of instruction. Under this head also come the many temporary exhibitions of art works, including those of the great expositions as well as those of the art societies and others.

2. Schools of instruction apart from museums or gallery adjuncts, where technical instruction is given to professional students by trained instructors and professors, by criticism of studies executed by the students in class room or studio.

3. Museums combined with schools of instruction, where the general public and students are not only afforded opportunities for the unguided study of beautiful collections, but are also given technical instruction in the schools and also where the influence of the school of instruction is carried into the work of the public museum or gallery by lectures given by expert instructors before the objects. Such institutions are the Art Museum and Museum School of Boston.

4. A fourth type of educational institution, and the one that is perhaps exerting the broadest and most healthy influence for good is the combined school and museum established as an integral part of a liberal university—such an institution as that proposed by the combining of the National Academy of Design with certain departments of Columbia University and with the Metropolitan Museum of Art, under conditions enabling the students to enjoy the benefits of the university and to have access to and be under the influence of the collections of the museum.

Institutions of this character have been in existence for years. Examples are the Yale Art School, the art department of Syracuse University, the St. Louis School and Museum of Art, a department of Washington University, and more recently organized the art department of Kansas State University, where a school of instruction is maintained and where exhibitions of high-class works of art are held annually. Other institutions which approach these conditions, but which are not directly connected with the universities, are the Chicago Art Institute and Pennsylvania Academy of the Fine Arts, in each of which the plan and scope of the curriculum is such as to cover almost as broad and comprehensive instruction as that of the university.

5. In a fifth group we may include societies, clubs, civic, State, and national associations, and organized influences which work for art education. Included in this group will be, for example, special courses of lectures on art subjects which may supplement the efforts of established art institutions or even lead to the establishment of new ones, perhaps in the manner in which the St. Louis School and museum was established. In many towns where no other organized influences work for art are groups of ladies who devote their leisure to planning and carrying out such lecture courses and building up sentiment in favor of more permanent art work. In such a manner the John Herron Art Institute, of Indianapolis, came about, as through similar influences the bequest of Mr. Herron has been made the most of.

The reorganization of the New York art educational situation now in progress is along a line upon which we may look to see important developments in the future in all those centers of civilization where the educational factors are sufficiently broad. Our most effective way to educate artists is through the cooperation of three factors, which have hitherto generally worked separately, the university, affording the essential opportunities for liberal education; the technical art school, in which master artists convey their art directly to their pupils, and the art museum, in which the student is brought directly into touch with what mankind has achieved.

The splendid work accomplished by the wise management of the parent art institution of the country, the Pennsylvania Academy of Fine Arts, has had a wonderfully stimulating influence upon a large constituency in making it acquainted with the real strength of American art. Its well arranged exhibitions during the last eight or ten years of current productions have commanded the respect and admiration of all honest lovers of national art.

The museum and school of instruction of the Pennsylvania Museum of Industrial Art has been equally successful.

The development of the western institutions has differed from the older ones of the East in establishing closer connection between the educational work conducted for the general public and that for the students, and by combining the interests of the school of instruction with the work of the museum in the most intimate manner possible. In at least two of these institutions, the Chicago and the St. Louis, the school of instruction has utilized the museum collections constantly to afford assistance in the

systematic education of the general public and students alike. Thus carefully planned courses of lectures intended both for interested students and the interested public as well have been given in the lecture halls and in the galleries before the objects.

A similar work has been carried on successfully in the Pratt Institute, of Brooklyn. From personal observations I am led to believe, however, that more successful use has been made of museum collections in the western than in the eastern institutions.

Still broader courses of instruction have been afforded in the St. Louis Museum, made possible by its close connection with the undergraduate department of Washington University, the school and museum forming the art department of that institution. Here professional art students are permitted to enter the classes of the undergraduate department, having the privilege of pursuing studies in the modern languages, history, and literature. This makes it possible for the art student with a common school education to acquire in addition to his technical training a broadening course of instruction, to fit him more fully for the practice of any branch of art work or calling allied to art than otherwise would be possible. These opportunities have, however, been taken advantage of only to a limited extent by art students, either those studying with the view of becoming professional artists or those pursuing the subject of art as a means of culture. This state of affairs is not so much from a lack of disposition on the part of art students to take advantage of the opportunity as it is to prejudice which has existed in the minds of administrative officers or professional teachers not directly connected with art as to the need of such instruction for professional art students.

Perhaps in the history of art schools in our country there has been no institution that has exercised a more pronounced influence upon the feelings and opinion of the people of its home city than has the Chicago Art Institute, to whose wise management may be safely accredited important modifications in the development of the big northern metropolis and the country round about it. In Chicago the work of the museum and school of instruction was backed by men who believed that if they could so conduct the affairs of the institution as to influence all the working people of the city through one generation further effort to raise money would be comparatively easy. This belief has been proven to be well founded. By a farsighted and generous application of business principles to the management of that institution an intimate civilizing influence has been maintained in the city for nearly a generation. Approval and recognition by the people of the city has been freely accorded for this work and is evidenced by a vote of a special tax which gives to its management, in addition to its other resources, an annual income that reached $58,500 last year and is increasing with the growth of the city. Without the influence of the liberal policy pursued by the management of the institution I doubt if this provision of public money would have been made. Valuable bequests and gifts are due to the same policy, including a bequest of $1,000,000 made by a leading merchant to establish a fund to be administered by the art institute for the beautification of the city through the erection of monuments and other works of art in its public squares, parks, and places.

Several vigorous institutions of this broad character have grown up in the West and Middle West during the last thirty years besides the St. Louis School and Museum of Fine Arts and the Chicago Art Institute. Among them may be mentioned the Cincinnati Academy and Museum (the school having existed as a working force many years before the museum) in Eden Park, of that city, the Detroit Museum of Art, the Cleveland Art School, and the John Herron Art Institute of Indianapolis.

The establishment of an energetic art institution in Kansas City is now assured. A public-spirited citizen, Colonel Swope, has given $400,000 to build with, together with the site, and established a maintenance fund also. It is anticipated that with the civic pride and energy so characteristic of that city others will come forward to help in building up the work.

In the South the most substantial progress in the development of an art institution, and a work that has produced a lasting influence upon the territory tributary to it, is that which has grown up as a department of the Tulane University, of New Orleans, known as the Sophie Newcomb School of Art, which has developed a pottery school of strength as an important factor in its work. Efforts to establish art schools have been made also in several other southern cities; but they may perhaps be termed sporadic, though there are earnest workers who hope with reason for better success.

One of the most recently created and splendidly directed artistic activities is that developed through the generosity of Mr. Albright, in Buffalo, N. Y. In this institution, as in Chicago, St. Louis, and Cincinnati, the double work already described is provided for and carried on in a broad and liberal manner.

Exhaustive reference to the work of existing art institutions and lessons derived from their experience is not practicable at this point.

THE DEVELOPMENT OF AN ART MUSEUM.

The movement for the establishment of art schools and museums in cities where civic pride is well developed has become so strong as to justify the prediction that eventually the citizens of most municipalities will enjoy the possession of public art galleries, where, at least, the so easily procurable and so highly beneficial reproductions of classic art works will be permanently on view, and temporary exhibitions of various kinds will be shown from time to time.

A glance at the development of a typical American art educational institution more in detail may perhaps serve as a useful exemplification.

The St. Louis School of Fine Arts had its inception in classes of drawing and decorative design in Washington University in 1874. A course of class lectures on art was given during the same year. Then instruction in ornamental geometry as applied to surface decoration was given to a class formed at the close of the lectures. The work was found to be popular with the students, the classes were well attended, and a number of generous-minded people became interested and provided funds for extending the scope of the work, adding classes in drawing and painting and from the antique and life models. In 1881 Mr. Wayman Crow presented land and a museum building, with auditorium, class rooms, exhibition galleries, etc., to be the home of these expanded classes, which became established as a department of Washington University under its present name. The museum commenced with a collection of reproductions of classic sculpture for the instruction of the students, and a small number of loaned paintings and objects of applied art work. The school and museum were thus combined and closely dependent one upon the other at the beginning, as they have been ever since. Classes were added from time to time. The course of instruction was further extended to include pottery, ceramic decoration, bookbinding, carving, and wood and metal working. Night classes for working people and others occupied during the day were established. A working library was built up. The courses of lectures were extended, including lectures of popular interest, which were open to the public, and were well attended. Courses of night and Sunday morning lectures, more especially on the application of art to industry, were undertaken. Friends were induced to become annual or life members of the museum, or guarantors of expenses and contributors to its work. The museum collections were gradually extended, by gifts, bequests, special subscriptions, and by the income of a small purchase fund, an endowment created when the building was presented. A small endowment was also created to help meet expenses which had been dependent on fees and on subscriptions from friends, and on the willingness of the university to make up the deficit. Progress, though slow, was certain and substantial, and the work done was based on good, solid principles, so that after a time its influence was inevitably felt in a broadened public opinion and feeling in the city and in good work done by its pupils. In one

way and another it has been a larger influence than the uninitiated would perhaps imagine, acting now through its former pupils who had been instilled with a true appreciation of art, and again through its director or through the members and ex-members of its board of control, business men who at first in many cases became connected with the work simply through a disposition to assist in any good work, but afterwards developed their love of art and often became enthusiastic collectors and exponents of the value of art appreciation. Of recent years gifts and bequests to the museum have been frequent, and some of them large, a bequest of last year by a deceased member of the board comprising an art collection valued at $250,000, and $75,000 in cash, while this year a gift from a friend still living (and in his prime, as may be surmised) has established an endowment of something over $200,000 for the purchase of American art works for the museum. In time the old home was outgrown. Prior to the building of the World's Fair the interest of the citizens permitted a city ordinance to be obtained, which provided that the institution might select a site in Forest Park and erect a building to be forever devoted to the purposes of art instruction. The act provided that the museum collections should be opened to the public free on Sunday afternoons, and that the mayor, comptroller, park commissioner, and president of the board of public improvements should be added to the board of control when possession should be taken of the park building. When the exposition was organized, suitable material for the formation of an art committee was found among the friends of the school and museum. The exposition authorities decided that it would be most fitting that a permanent home of art should grow out of the exposition to continue its work of education and enlightenment in a broad and inspiring manner. Accordingly the central structure of the great Art Palace was built in a permanent form, at an outlay of $640,000, with the anticipation that if all should go well the art museum and school might in conformity to the ordinance referred to and with the consent of the city acquire this building as its permanent abode. Largely through the exposition also, the museum has acquired a very comprehensive collection of reproductions of American sculpture, which is now installed in the large central nave of the park art building. Taking advantage of the favorable conditions now existing, a renewed and greatly enheartened activity has been inaugurated by the board of control. The museum membership has been greatly augmented. At this writing the holdings of the school and museum have increased from the small beginning in 1880 to a total of over $2,000,000. Broad plans for the enlargement of the work have been mapped out, providing for a monumental museum of comparative architecture, as a new department, and for other features intended to bring the educational influence of the institution home to the people of the surrounding country as well as of its home city.[a]

With a liberality of purpose rare to find, which has especially endeared his memory to us, Mr. Wayman Crow, when he presented to the art school the home of the museum, contemplated such a possibility as its extension through the generosity of other and perhaps wealthier men, and refused to have his name connected with the institution in any way, saying: "If there is to be a name, let it be the name of St. Louis until some generous-minded citizen shall come forward and shall provide for the whole work that I am in a small way inaugurating—then let it bear his name." No institution in the country in its earlier stage of development had seemingly a more brilliant future in store for it than had this—a promise attributable to the liberal and broad-minded view of the then chancellor of the university, the late Dr. William Greenleaf Eliot. Following, however, there were several years comprised in a period which might be

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[a] Since the above was put in type, the museum collections have been moved to the new park building, inherited from the exposition, and the city has established an art museum fund of one-fifth of a mill on the dollar of taxable property, which will add to the museum's income for the next fiscal year about $102,000, and will increase *with the growth of the* city.

described as one of arrested development. Fortunately, more recent influences which have dominated the institution have revived the spirit in keeping with the carrying out of the broad and liberal plans formulated in the earlier years of its development.

The work laid out for the accomplishment in planning the development of this institution to fulfill the hopes and ambitions entertained at the time of its dedication was far broader than any visible resources, wider and deeper than the scope of the usual art institution. Free from any restrictions, the aim was to help to broaden the accepted conception as well as the appreciation of art, and to help to broaden the lives of our people through making art a vital, everyday influence in commerce, in industry, and in living—an ennobling and enriching possession of all the people. It was clearly seen that successful efforts to further this ambition would have a far-reaching influence upon American life and upon industry. It was recognized at the beginning of the work, and adopted as a working maxim, that art is simply the expression and the fulfillment of the healthy and natural longing of normal human beings for beauty and for the expression of ideality in design and workmanship, and should therefore be a matter of everyday enjoyment and use to every normally constituted man, woman, and child. With the understanding (that is better understood in France, Germany, Japan, England, and elsewhere than in our own country) that art or good workmanship—call the factor of ideality by what name you will—is the difference between success and failure in industry, it was sought to engender in our own country the appreciation of that beneficent influence in commerce and in life.

In some way similar to this, one after another, art institutions to the number of over a half hundred have sprung up in our country. The influence for good they have already had upon the minds of our people is incalculable. That it is a very practical and useful as well as purifying and æsthetic influence may easily be discovered. The principal of a young ladies' preparatory school attached to a well-known university said to me that the years to which she looked back as the most fruitful and instructive of her life were those spent in an art school. There she had learned to see as she never could have seen without that artistic training. There, too, she had learned to command her hand and make it follow the eye and the brain. She imbibed the principles of composition and good taste as applicable to literature as to art. She says that she constantly looks back to her experiences at that time for the inspiration to meet the practical difficulties that confront her daily life.

When we examine the class of people who pursue the various studies in this St. Louis institution, for example, we find almost every trade and profession in its city represented. No one for a moment supposes that these people are pursuing their work simply as an amusement. Neither will the most careless observer decide that most of them are working with a view to becoming professional "artists"—that is, people who expect to produce original pictures, busts, and statues as a profession. In the evening class four-fifths of those working are engaged in trades or professions that require a knowledge of drawing or modeling to follow them successfully.

In building up a new museum with limited resources a point to be kept in mind is the value of concentrating on some line of collecting in which it can reasonably hope to command the attention and respect of men of intelligence in art matters and at the same time serve as a valuable factor in art education. Thus the St. Louis Museum, for a quarter of a century mainly dependent upon voluntary or solicited contributions, has aimed, and endeavored with all the energy it could command for that purpose, to possess a notable and comprehensive collection of American art, and has made substantial progress toward realizing this aim. And again, devoted as this institution has been to the broadest type of art educational work, it has necessarily found comprehensive collections of applied art work indispensable, and has ceaselessly endeavored to advance in this great field—a field the more suited to a young and not too wealthy museum from the fact that with knowledge and painstaking care very moderate expenditures can be *made to produce results of* great educational value. Under these conditions the St.

Louis Museum, while congratulating itself upon its paintings by old French, Italian, or English masters—by Corot, Dupré, Daubigny, Israels, Cazin, and other great workers—and grateful for them and fully recognizing how much its usefulness is extended by the possession of these examples of high attainment, yet feels that it must rely almost entirely upon the direct gifts of such works, or of funds designated for their acquisition, to extend its collections in this direction, and believes such an attitude most reasonable for a young American museum. That the friends of the museum and of American art have the courage of their convictions in this respect is shown in recent gifts, and especially in one already alluded to, which came from a friend of American art in the form of a very substantial recognition of this plan, establishing an endowment of funds invested to yield an annual income of something over $10,000, with the single condition that every dollar of the income should be used for the acquisition of works by American artists.

If we admit that there may be in the future such a thing as an American art, it seems to me that it must be essentially a creative art, and that for this it must be a response to a national hunger. It must be based on popular appreciation of artistic principles; must have an intimate and vital place in the minds and the lives of all the American people. It must invent as the art of the fifteenth century did. It must study the works of all schools and carefully select their best points as a basis for further building, without servilely copying them. It may in one sense imitate, but must not merely reproduce. Out of well-sustained American effort to realize art as a national possession would grow an art not French, English, or German but American that would approach more nearly a universal style than any now existing, and that would be felt in every American production into which the principles of art can enter as a constructive element.

In building up in a locality any extensive movement, such as a thorough art educational work, the organization of which must be dependent upon monetary contributions of individuals, it will, of course, be found that the interest of people must be appealed to in some way before their aid is sought. In any community may be some man who will give generously toward the establishment of an art museum, but there must be wide interest before giving can become general. This, obviously, in a new field, among a community where the development of civilization has been in large part of the ruder sort, concerned chiefly with the more obvious phases of utilitarianism and materiality, and to not any very great extent including the refinements, will make the growth of an art institution slow at first. In St. Louis, for example, a generation ago, when one man had come forward and erected at a cost of nearly $150,000 a building dedicated to the uses of the art school, it was thought that it would not be difficult to secure by gift a fund of $100,000 to be devoted to the purchase of works to be placed in the building. The history of the years next succeeding proved, however, that it was then as difficult to secure gifts amounting to $30,000 as to secure $300,000 in a neighboring city where there had been opportunity for art educational truths to attain wider appreciation. A few persons in Cincinnati at an early day saw the wisdom of placing those conducting the practical work of the art school in a position to shape their work so as to reach the homes of the people. Those who know anything of the work of the Cincinnati School of Design know how its influence has reached every class of people in that city. Enter almost any house and you will find an evidence of its teaching expressed in the bit of carving, the decorated panel, or study in form. The support given to the popular phase of the work of that school made it possible to develop and shape an intelligent public opinion, and, as a result, when there came a call for large funds to establish the work upon a broader and more liberal foundation people were ready to give. This was not due to any difference in nature between the people of the two cities, but was simply a matter of wisely directed educational influence creating a popular appreciation. Had it been made possible at the beginning of the work in St. Louis to conduct a similar educational

campaign, similar results would have followed for its school and museum many years ago, and long since an abundance of feeling on the part of the whole community would have grown up in favor of making such an institution a great factor in the higher training of the people not only of the city but also of the country tributary to it.

In the development of an effective art institution, especially in working along the lines of greater practical usefulness (which involves building for the future), obstructions will sometimes be raised in most unexpected quarters, through dismal failure to comprehend the nature of broad constructive measures, or through the tacit opposition to whatever they fail to understand on the part of some whose assistance it would seem should be taken for granted, but generally are to be overcome by the constructive worker, with the proper application of labor and leverage, for the inevitable logic of nature is on his side. The most adverse criticisms of his methods in pursuing the good as he understands it should be always welcomed by him, for whatever their motive they show that those who make them take interest enough to give their attention, and draw the attention of others, at least to the most obvious conditions to be met, with a view to suggesting improvements or correcting errors, and the one great foe of progress—the captain-general of the forces of negation—is apathy.

Art advancement in this country, as a general movement as well as in the detail of method, has still to deal with active opposition. Gratifying to say, however, we find not only that influences formerly antagonistic have been won over, but also that less of the obstructionism comes from the uncivilized lack of ability to comprehend what we are aiming at, than comes from engrossment in other necessary progressive work, accompanied by the fear that devotion to art may detract from possibilities in other desirable directions, a fear which, so far as it is based upon desire for the public good in any direction, melts away as it is learned how universal a factor for advancement art education is.

The whole study of art may be viewed in so many aspects that we need not be surprised to find many opinions on it, or that these opinions are expressed with a confidence in proportion to the narrowness of the view taken. Many, indeed, of the theories and systems advanced are the work of amateurish critics, too often of little practical use, and naturally so, for a larger view alone reveals the difficulties of the subject. It would be next to an impossibility to trace the line of error through the various opinions and theories of the day, and indeed an attempt to do so might serve to increase the very evil we desire to abate. One expending his effort in refuting fallacies or in destroying misconceptions would show lack of wisdom. There is but one way to make large progress, and that is by constructive work.

Those who have had any experience in the actual carrying on of any branch of art work in education are familiar with the arguments brought up against attempting to do anything "just now." It is always the same thing, based upon a feeling of inertia the best antidote to which is simply a persistent pegging away. We are told, for example, when we propose some progressive step for the advancement of a city in art, that the people of our particular municipality are different from the people of other cities—cold toward art, or too much engrossed with innumerable other activities and "can not do everything at once," or anything "at present"—and that the masses of our people are not far enough advanced to warrant our taking up the work with the same spirit displayed elsewhere. These and like remarks are freely offered by those who feel that their peace is being disturbed; yet if we work on indomitably for constructive, permanent results with the true spirit of the builder, we always find evidence that our people are not lacking in appreciation, and that great good can be accomplished to the general advancement of the city, out of all proportion to the cost of the work when the results are impartially compared with what of real value is accomplished through expenditure of time and money in different fields.

There is no justification for a negative attitude on the part of those able to assist in *this work; but if people* will persist in it we should not allow them to influence us in

any way. The work may be advanced by wise action, and it may be retarded by the unwillingness of passive obstructionists, but opposing influences are doomed to be thrust aside. Civilization will go on irresistably. Indeed, those engaged in advancing general art education are working merely as instrumentalities of an inevitably progressing movement.

In considering modern industrial methods of production and their influence upon art and upon the advancement of mankind and the attitude toward them proper to be held by artists, let us remember that, since art is for all, distribution is nearly as important a factor in art production as it is in industrial production. Were it not for modern productive methods objects of art would, as of old, be almost confined to the few by reason of cost and scarcity. Surely it is better that all the people should have for common use articles possessing qualities of beauty, even though not artistically complete, than that all the art treasures of the world should be mewed up in the houses of the rich and out of the reach of the great mass of the people. It can not be denied that the distribution of colored lithographs of great paintings by newspapers and other agencies has wrought wonders in elevating the taste of millions who had else never seen or heard of such pictures. I do not for a moment pretend that these copies are always well done from a technical standpoint; but I do say that they convey the thought, the sentiment, even in many cases the beauty of execution, which the artist has put into the work, to millions who are thus led to understand and value the beautiful.

It is true that it may be hard in many instances to reconcile the conceptions of art with the conceptions of the mechanical engineer. We are as yet unadjusted to the modern influences which have so multiplied the power of man to modify nature to do work. Perhaps we as little know the artistic possibilities in the full perfection of mechanical applications as our predecessors could know of what has already been accomplished. It is still true that the greatest of the world's artists have had to deal with the humblest implements of industry, and again true that the ruder tool is endowed with a cryptic value as the formal symbol of an art; yet I can not see that the harvesting machine need in itself be a less interesting or beautiful thing than the reaper's sickle, and on the contrary I see that the artist may as well supplement the workman in the use of modern tools as in the use of those of ancient times. Why may not that perfected and highly useful mechanism, the modern printing press, a product of man's brain which seems almost to have acquired human intelligence, be as artistic as the press of Gutenberg, provided always it be so made that it conforms to standards of grace as well as of utility? Considered in view of its functions and the purposes of its creation each, an agent for the distribution of thought and knowledge, has a dignified part in the advancement of civilization and the development of art.

How largely industry and commerce may be served by art may be seen in the fact that artistic workmanship is one of the qualities most universally appreciated and sought for throughout the world. When we look at the history of countries that have grown great in commerce or manufactures, we find that their industries have been under the influence if not the absolute control of that which we may style "art." When we inquire as to those countries which draw to themselves the homage of travelers and students from over the world in the largest degree, and so prove themselves the most powerful centers of human interest in this world, we find that they are supreme in art.

If beauty were to become a thing apart from the life of man—if the things to which art applies its mystic halo of ideality and sentiment were to be locked up in museums, to be looked at with scant understanding and never made use of practically, while mere obvious utility, obvious at the cost of ugliness, ignorant of ideality, were to be the standard for the things of daily life—then indeed art were dead and industry without its soul.

This thought was dominant with William Morris and his collaborators when they introduced in England an industrial revolution that has affected this country as well

and was expressed by Morris but a few years since, in picturing existing conditions, when he voiced the belief that "art was sick unto death," and that the cause of her undoing was that "the artist came out from the handicraftsmen and left them without hope of elevation," with the result that "both have suffered, the artists no less than the workmen."

In a measure, the direction taken by the industrial progress of the world in the last century of marvelous mechanical achievement, with its feverish activity in the production of material things to meet great and growing demands, has, through the almost absolute devotion of the powers of the modern world to primary mechanical needs, for a time militated against the growth of some of the finer and higher sentiments; yet this has come about by reason of a temporary displacement of the older ideals, rather than by any inherent antagonism.

No mere theorizer, but a practical man, and withal a most earnest, honest, noble-hearted one, Morris made himself proficient in six different trades—weaver, blacksmith, wood carver, painter, dyer, printer. He also composed good music, wrote good poetry, was an accomplished linguist, good speaker, and master of the art of bookmaking in the old style of those who made books for the love of it. The creative power of art in industry is seen in the fact that the aims and work of this man and his associates at Kelmscott House have, at least in the realm of the decorative arts, revolutionized the houses of nearly all the English-speaking people of the earth. Had they done nothing more than "to lure us away from the thralldom of the haircloth sofa" and other such monstrous products of that mania for mere elementary utility which shouted aloud the love of ugliness, these true arts and crafts workers would be entitled to the lasting gratitude of mankind. They have done much more than this. They breathed into their work the spirit of loving interest which made the product a part of themselves. They gave the best of their minds, the highest flights of their imagination, the honest, careful work of their own hands, to the simplest things they made. Through this they accomplished two great ends: First, the creation of things both useful for our common needs and beautiful, maintaining what has been well called "the balance of the useful and ornamental;" second, the demonstration again that there is still the demand for beauty even for the most commonplace thing, if that beauty make the thing not too costly for common usage and be of a kind fitted to the use—qualifications as essential from a true artistic standpoint as beauty of form. In thus living the old doctrine that a useful thing is more useful if beautiful, and that there is a beauty of fitness as essential as lines of grace; in thus showing us how it is the mission of the artist to bestow ideality upon things and thus to impress conceptions and sentiments of beauty upon men, this school of art workers sounded the keynote of an art revival and a higher industrial development.

An epoch-marking lecture was delivered by Cardinal Wiseman about fifty years ago under the title "Relation of the Arts of Design to the Arts of Production," in which he endeavored to bring home to his audience that these arts are intimately connected by their nature and should be so in their application. He held that a decay in art had come because of the fact that to a great extent this connection had been severed, and used a very striking illustration to show how this change had come about. He pictured the establishment of an art museum in England, one department of which should be filled with a complete collection of objects of purely classical Roman art of about the first century, including fine marble statues, a richly colored pavement, Etruscan vases, bronze household utensils, engraved gems, and gold and silver coins of rare workmanship. He then assumed that some Roman gentleman of that period should appear upon the scene and should have the right to make such use of these things as his taste and the habits of his time would have dictated. With these in mind the Cardinal tells us these objects, valued by us purely as works of art, would have been disposed of by the Roman thus: The statues, unless they happened to be those of his ancestors *(in which case they* would go into niches of his home), would have gone to his garden,

or elsewhere, merely as pieces of household furniture; the pictured mosaic floor would be used as we now use our floors, not to show as a picture, but to walk upon; of the Etruscan vases he sends one, a water jar, to the scullery; another, an oil holder, to the kitchen, and a third, which is a basin, to his dressing room; the bronzes go, some to the kitchen, some to other apartments—all are articles of common usage; the gems he wears as ornaments, and the coins he naturally puts in his purse, since to him they are the money in daily use. Thus the Cardinal showed how these articles, from our point of view far too rarely beautiful and sacred for any other use than as models of artistic taste, were to their former owners ordinary utensils adapted to every-day rough service, because at that period of Roman history a perfect understanding of the uses and benefits of the applied arts prevailed, so that almost every valuable thing that was made was by a certain necessity made beautiful. No distinction obtained between the arts of design and the arts of production, and because of this every artist was an artisan, every capable artisan an artist. To show further how vital is the influence of this union, the lecturer instanced from history the instructive examples of men who produced the greatest art works of their day—in some instances of all time. Thus the great Benvenuto Cellini, Lucca della Robbia, Brunelleschi, and others have shown to the world how the highest artistic genius has felt itself not demeaned by the roughest work of the forge, hammer, or chisel. From this we have those rare gates to the chapel of Henry VII in Westminster Abbey, worked by Torgianio, a contemporary of M. Angelo. From such instances, as from the work of Hoffman, of Nuremberg, creator of "The Beautiful Fountain," at once artist and a craftsman, or Matsys, of Antwerp, the artist-blacksmith, or Kraft, the artist-mason, maker of the wonderful stone stair in the church of St. Lawrence at Nuremberg, we learn that the union of these qualities of designer and workman in the same individual man is historically coincident with the greatest art production. Most conspicuously was this true with the greatest of all artists, the incomparable Michael Angelo; but, indeed, not confined to any branch of art, this truth pervades the whole realm of it and characterizes nearly all its greatest examples. The walls of houses in ancient Rhodes, Pompeii, and Herculaneum were decorated by the greatest artists of the day. Raphael himself thought it not beneath his dignity to decorate a gallery.

The reasoning to be drawn from these historical illustrations seems to establish conclusively that if the union of the art of execution with the art of design—of the artisan with the artist in the same individual—can no longer be maintained as of old, there must then, unless there is to be an end of art in the broadest and best sense, be the most harmonious cooperation between designer and producer, with high ideality on the part of each.

If there exists any seeming antagonism between the artist and the engineer, it is reconcilable, for the business of both is to express human ideals; and it will have to be reconciled, for they must work together. This is essential, because art is to be for all, and there are not enough artist-artisans in all the world to-day to produce, working as did William Morris, one-thousandth part of the art objects needed.

The severance of the artist from the artisan lamented by Cardinal Wiseman, and perhaps reaching the climax of its ill effect in England at about the time of his utterance, fifty years ago, is not to be charged to the industrial requirements or tendencies of our own time, having had its origin long ago, as a social movement incident to an outgrowth of mistaken ideas as to the indignity of labor. If it may have been emphasized by the introduction of modern machinery with the consequent partial elimination of certain forms of hand work which were vehicles of artistic expression, I believe that this effect is temporary and belonging only to the elementary stages of the utilization of machines, and that modern conditions offer means of reuniting the old spirit of the designer with the spirit of the producer, and so, indeed, favor the development of art in ways far beyond the vision of the artists of long ago.

Morris disclaimed any prejudice against machinery, though I think he with all his school have been in fear lest craftsmen might become as mere parts of machines. To some the thing which is made is not beautiful unless there are upon it "the loving mark of the tool," and this must be the hand tool, not the machine. Morris we know used machinery just as little as he could, reversing the custom of some manufacturers of never using a man where they can make shift with a machine. The widespread application of such extreme—may I say, narrow?—practice is, however, prohibited by modern economic conditions. On the one hand, starvation would follow fast in any country whose artisans eschewed the use of all machinery or insisted that each product should be in all its parts the work of but a single handicraftsman. On the other hand, the use of machinery inadequate to its task and the unskillful inartistic management of machines have been a stigma upon the greatest modern contribution to human progress.

A broader view satisfies me that the modern workman need not lose his individuality, power of design, or love for the beautiful, even though his part is manipulating some machine that makes only the head of a pin. While such narrowly mechanical work does not of course conduce to efforts of imagination, yet the machine is but a tool expressing the imagination of the designer, more complicated than the tools of the past, still, after all, a tool, as the hammer, the chisel, the pencil, the brush. Those simpler instruments are more under the control of the heart and mind of the workman, it is true, than, say, the modern machinery for weaving and printing decorative designs upon fabrics or wall papers; yet with skillful workmanship the machine may afford the designer far greater power, may be far more under control, than ever could the ancient tool. We have in Japanese block prints examples of the artistic possibilities of color printing.

Right, then, in the conclusion that our industrial evolution is not inimical to art, may we not proceed a step farther, and find that art is indeed an essential factor in industrial development—that industry is indebted to art for a share of the great results it has wrought? Shall I be regarded as very ignorant or mistaken when I say that a mechanical drawing may be and should be artistic—that if it is so, the machine to be made from it will be better? Surely, drawing as an art—the delineation of form—is and always has been at the very foundation of all the productive agencies connected with the decorative arts. This, as has been pointed out frequently, is strikingly illustrated in the wonderful industrial development of France, and the even more startling industrial advance of Germany following in the footsteps of this. "Drawing and industrial schools form the true basis of the wealth of France," the Prussian minister of commerce stated officially in 1873. It was his belief that the art instruction given in the French trade and other schools, and applied by their students in industrial production, added so greatly to the value of French articles of commerce that they were the prime cause of the amazing national prosperity; and he recommended the introduction of the system into Germany. How diligent the Germans have been in carrying out the spirit of this recommendation, and with what splendid results for German progress, should be matter of general knowledge to our people, and has already been pointed out in this paper. Kunstgewerbe schools and museums have been established all through Germany; enormous appropriations made by the German Government, as also princely gifts by individuals; and great efforts carried on to extend these institutions and bring their influence to bear directly upon the working people of the whole country. A recent American authority to testify of this is Mr. Charles M. Schwab, who in an interview following his return from Germany, dwelt upon the fact as having been forced upon him that the Germans are now excelling in quality and Americans merely in quantity of production. Mr. Schwab sees in this the result of superior German education, of the development of the German mind through institutions which teach the students to analyze, compare, and perfect, and

which provide opportunities for them to do so. He makes the significant suggestion that in quality, not in quantity, lies the victory of the future. Certainly, no one will deny that in all industrial countries where it has been encouraged the application of artistic skill to the designing, for instance, of carpets and wall paper patterns, of furniture, of all sorts of domestic utensils, has enormously stimulated manufactures.

So impressed were our people with the beauty of Japanese workmanship, as shown at the World's Fair in St. Louis, that they purchased more than fifteen million dollars' worth of Japanese artistic industrial productions.

The art movement in Great Britain has done wonders in dignifying labor and in improving the condition of her people. Innumerable examples might be cited to show the workings and the results of this movement. The directory of the Bank of England caused designs to be made for chairs for their meeting room some years ago; a number of artists competed; the result was the production of a chair at once comfortable, strong, and graceful in its lines, which as "the Bank of England chair" is now a well-recognized article of commerce. Again, the Morris patterns for fabrics of all kinds are so well known and have exercised such an enormous influence upon industrial production as to need only mention to illustrate my point. It has indeed become a perfectly well-established rule of commerce that new and beautiful designs must be constantly forthcoming in jewelry, in fabrics, and in all industries affected by the decorative arts, or trade will languish. Recognizing this, the principal jewelry houses of New York contribute liberally to the local schools of design and offer employment at once to all finished students of such institutions who possess merit. That this commercial demand for designs is hurtful to art through any tendency to select inferior work and handicap the better, I believe is not true. While it may seem so in certain localities and for a limited time, yet, remember, it can not be generally true unless it negative the common experience of mankind. A design, it should not be forgotten, is truly artistic only if it be both beautiful and true—and by true I mean true to nature—the alphabet of all art—and therefore fitted for the purpose for which it is designed. I do not fear contradiction when I say that any design possessing liberally these elements of truth and beauty will not only sell, but will endure, and that the artist producing it need not despair of our commercial age. Illustrations of the value of art to a nation may be multiplied until an overwhelming preponderance of evidence is placed before those who doubt. In a recent paper on "Art education the true industrial education," read before the department of art education, National Educational Association, Nashville, Tenn., Dr. W. T. Harris gave illustrations of this, from which I may be permitted to quote one or two paragraphs. The doctor said:

In 1851, at the World's Exposition in London, it became evident that English industries were not of such a character as to compete with those of France and Belgium. Prince Albert, wise and thoughtful as he was, set about a deep-reaching system of education that should correct the national defect and recover the prestige of British arts and manufactures. The South Kensington Museum was established and day and evening art schools set up in all manufacturing centers. The museum placed at its foundation a collection of works of art showing the history of art, its beginnings, its high-water marks, and its fluctuations. On this basis instruction was given in those forms of ornamentation that the world has pronounced beautiful. There began from this time a gradual rise in the taste of the English workman; from being an artisan pure and simple he began to be an artist. England has gone forward rapidly in the direction of producing works of taste, and her useful manufactures, heretofore made without reference to beauty, have improved in tastefulness of design and execution.

and again:

The establishment of a great national art gallery, the Louvre, and the studies of French savants in the canons of good taste had long before revolutionized French manufactures and given France the supremacy in the world market for goods that command high prices and ready sale.

There is also the other side, as pointed out by Doctor Harris in the same paper:

On another occasion I have called attention to the backward state of Swedish education in æsthetic art. Sweden is the leader in the manual-training movement, but her educators have not yet seen the importance of developing correct taste among the laborers as a condition of industrial success. Accordingly, we find that ingenuity is increasing to some extent in that country, but that there is no improvement in the artistic finish and ornamentation of their goods. Clumsy shapes and incongruous ornament are the characteristics of Swedish goods. Other nations do not want such ugly shapes in sight and do not buy them.

Thus is indicated what is meant by advancing industry through art. It is a matter that will affect the condition of every class of society—people of wealth as well as men and women who earn their living by work; it appeals to all classes alike.

The educational influence of expositions in extending the understanding of art is immeasurable. Many thousands of Americans, indeed, saw an art collection for the first time when they visited St. Louis in 1904. There are comparatively few art exhibitions or collections of art works in the West and Southwest. The value placed upon the opportunity is indicated by the fact that the art galleries were always well filled, and were crowded badly at times when other buildings were only moderately full. 111,000 visitors having been counted on one day in the American section alone.

EDUCATIONAL INFLUENCES OF EXPOSITIONS--CHICAGO AND ST. LOUIS.

At the Columbian Exposition at Chicago we were convinced that the classification ought to be arranged on so broad and liberal a plan and so expressed as to make it possible to bring together the finished products of every branch of artistic activity. To carry out this principle, we thought it wise to include what had been called the "industrial arts" and to obliterate the line which up to that time had separated the "fine arts," so called, from other original expressions of art workmanship by adding to the usual classification scope a group of exhibits under the title "applied art." Under the classification so broadened, all art works, whether on canvas, marble, plaster, wood, metal, glass, porcelain, textile, or other material would be recognized as equally deserving of respect in proportion as they should be worthy from the standpoints of inspiration and technique. Art craftsmen were to be given full advantage of this broader classification, which would comprehend all forms of artistic representation in which individual artists or groups of artists working cooperatively express their thoughts in whatever media they may select. The last ten years has seen a great development of interest and activity in the revival of the handicrafts.

At that time the applied art workers of our country were not far enough advanced to avail themselves very fully of such opportunities as this breadth of classification presented to exhibit the possibilities of American art. The influence of the effort that was made, however, exceeded the hopes of those who had inaugurated it, and at the time of the St. Louis Exposition the application of art to objects of workmanship had made such progress that entirely new conditions existed.

The art department at St. Louis felt justified in still further broadening the work, with the result that no thinking person who spent much time in the St. Louis Exposition art galleries could fail to be convinced of the importance of including the applied art work in the art exhibit—importance for its good influence in the development of our manufacturing industries as well as for its value in disclosing to hundreds of thousands of studious visitors some of the possibilities of art for them and developing their appreciation of form and beauty of color; and importance also for its effect as a feature of an exposition in exciting the interest and applause of visitors. The following classification, while not attempting to be a perfect grouping of the branches of art work, is yet believed to be very inclusive, and is reprinted here as marking a point from which there should be no retrogression in future exhibition work:

LOUISIANA PURCHASE EXPOSITION—DEPARTMENT OF ART.

CLASSIFICATION.

The department of art of the Louisiana Purchase Exposition will be open to such works of American (United States) and foreign artists, whether previously exhibited or not, as may be classed under the head of art, in accordance with the following general classification:

PAINTINGS, CARTOONS, DRAWINGS, ARCHITECTURE, SCULPTURE, DECORATION, AND ORIGINAL OBJECTS OF ART WORKMANSHIP.

GROUP 9.—*Paintings and drawings.*

Class 27.—Paintings on canvas, wood, metal, enamel, porcelain, faïence, and on various preparations; by all direct methods in oil, wax, tempera, and other media; mural paintings; fresco painting on walls.

Class 28.—Drawings and cartoons in water color, pastel, chalk, charcoal, pencil, and other media, on any material. Pyrographic designs. Miniatures on ivory.

GROUP 10.—*Engravings and lithographs.*

Class 29.—Etchings and engravings in one or more colors. Autolithographs with pencil, crayon, or brush.

GROUP 11.—*Sculpture.*

Class 30.—Sculpture and bas-reliefs of figures and groups in marble, bronze, or other metal, terra cotta, plaster, wood, ivory, or other material.

Class 31.—Models in plaster and terra cotta.

Class 32.—Medals, engravings on gems, cameos, and intaglios.

Class 33.—Carvings in stone, wood, ivory, or other materials.

GROUP 12.—*Architecture.*

Class 34.—Drawings, models, and photographs of completed buildings.

Class 35.—Designs and projects of buildings. (Designs other than of architectural or constructive engineering.)

Class 36.—Drawings, models, and photographs of artistic architectural details.

Class 37.—Mosaics, leaded and mosaic glass.

GROUP 13.—*Loan collection.*

Selections of especially interesting art works of various kinds from institutions and private collections. (Representing the various classes defined in the department of art.)

GROUP 14.—*Original objects of art workmanship.*

Class 38.—Art work in glass (other than that which is included in group 12, class 37).

Class 39.—Art work in earthenware. (Pottery or porcelain.)

Class 40.—Art work in metal (other than that included in group 11, class 30).

Class 41.—Art work in leather.

Class 42.—Art work in wood (other than that included in group 11, classes 30 and 33).

Class 43.—Art work in textiles.

Class 44.—Artistic bookbinding.

Class 45.—Art work worthy of representation which is not covered by any of the preceding classes of this group or other groups of the department of art.

This art classification comprises five main divisions or "groups," correlated to the more distinct branches of art work, and nineteen subdivisions or "classes," each in turn comprising certain closely allied phases of expression. Each "group" is characterized by aims, standards, and techniques strongly divergent from those of other "groups" and calling for a certain peculiar appreciation and knowledge in the just appraisal of its exemplifications. It was the plan that the selection and judgment of exhibits in these various "groups" should be intrusted to juries and committees of special as well as general artistic training, so far as practicable, although it was desired to characterize the exhibit of the art department as a whole by a breadth of view and harmony of standard not perhaps compatible with too minute specialization of viewpoint. It was deemed that the subdivisions of the "groups" into "classes" would bring into juxtaposition works sufficiently similar in character to be judged in relation one to another. It was planned also to insure, in constituting the juries and committees, that no class of work should lack sympathetic and comprehending representation.

To these five exhibit groups covering the range of art work and including all competitive exhibits was added to complete the St. Louis Exposition Art Classification, for its educational value in such an art exhibition, a special noncompetitive "loan collection group," to comprise a comparative and retrospective collection of works selected for their etiological and educational value from the whole field of art, but to consist in the main of such masterpieces of various schools and times as would afford visitors the opportunity of seeing the best art that has been produced, while especially indicating the rôles, sequential influences and reactions of contemporary schools and illustrating the world's artistic development.

In order that the art of each country of the world might be adequately represented and justly recognized, it was essential that a high and catholic standard of judgment, comprehending the national points of view and phases of artistic aspiration, should be observed in the selection of exhibits for each national section and again in the distribution of awards. It was essential to give to all people who could produce art work worthy of serious consideration the fullest opportunity for recognition, without regard to country, position, or race, or the media employed in effecting artistic expression. To this end the official representatives for each country were urged in the first place to base their selections in making up their representations upon the standard of their own most enlightened national art appreciation, not upon a supposition as to what phases of their art would appeal most strongly to our people, nor, above all, upon any fictitious taste created by commercial management. With such a basis of selection it was of course clear that academic restraints would be held in check and that the various national sections must evidence points of view as wide apart as to what is best in art as are the art workers of China and Japan from those of the South American Republics, in geographical location or historical development.

Of the influence for good upon the people of our country very much may reasonably be hoped. The art impulse traceable to the Columbian Exposition, already referred to and evidenced again for another example in the increased demand for a better and more dignified character in architecture, enriched by the work of mural painter and decorative sculptor, indicates the measure of good born from the influence of a great exposition. In another manner was shown an earlier stage of our artistic development under the impulse of the Centennial Exposition (1876), which may be said to have crystallized the artistic consciousness of our nation. In a greater degree than was possible following either of the previous expositions, may it be predicted, our people, particularly of the Middle West and South, will profit from the artistic influence of this exposition. The multitude of visitors who thronged the sections of the art department have had awakened within them a realizing sense of the value of art and have carried to their homes new impressions and broader views of the possibilities of enriching their lives by making art an everyday reality.

While in the progress of the work intrusted to me certain departures from the plans as first organized and in details of operation from time to time were required, yet in essentials, notably where our plans differed from those of previous expositions, we were able, fortunately, to attain in good measure the hoped-for results. The aim of this world effort to bring into review for comparison and enlightenment the artistic achievement of mankind was to help produce a fuller recognition throughout the world of the value of art as a vital factor in the life work of a people.

A gratifying development was the pronounced recognition by certain of the older countries of the important position now held in art by the United States- a recognition exemplified at the beginning of our work in the increased willingness to respond to our efforts in the interest of their representation at this latest of American expositions, and subsequently, as a result of the display of our own American art in the exposition, emphatically expressed in the most graceful and pleasant manner by foreign members of the international jury of awards. In this recognition Great Britain and Japan *were leaders, expressing* their appreciation at the outset by adhering rigidly to the

exhibit classification of the department, making throughout all groups very complete and dignified exhibits of their national arts—the most complete ever made at an exposition by any visiting countries.

Comparing American art as it appeared at the St. Louis exposition with art as shown at previous expositions, we see that a striking development has taken place in the broadening of artistic aim accompanying the maintenance of high endeavor. The influence of the Columbian Exposition (Chicago, 1893) upon the artistic development of America has been evidenced notably in a growth of appreciation for architecture, mural painting, and the applied arts during the past decade, which in the latter field made possible the impressive collection of objects of art workmanship in the American section at St. Louis, notable, indeed, as a record of artistic advancement and great in its promise for the future of most important phases of art expression, comparatively young in our country, and in the field of decorative painting made possible at St. Louis—the first comprehensive exposition exhibit of mural work. If the chief of the art departments of these two expositions might hope to look with satisfaction upon any endeavor of his in connection with art, it would be for his effort, consistently maintained for many years, finding its first great opportunity in the Chicago exposition and reaching toward fruition at St. Louis, to assist in broadening the scope of recognized art and doing away with narrowing lines, to bring under one universal test of artistic endeavor all phases of art expression, so that, alike for the product of the academically trained painter and for the most recent effort of the advanced applied art worker, or any other artistic production, whether of architect, painter, potter, glass, or metal worker, bookbinder, or sculptor, or artistic worker in another branch, the sole measure of the artist's achievement may be his comparative success in conveying inspirations and impressions of high artistic character.

The popular interest excited by the American sculptural display at St. Louis and the recognition accorded it by the international jury must work to the encouragement of our plastic art, while in this, as in every branch of art work, the unexampled opportunity to compare methods and results must prove to have been invaluable to the progressive worker, of whatever nationality, who made use of the opportunity. Very impressive was found the advance made by American sculpture since the period of the Chicago Exposition, in part traceable to the direct influence of the work created and displayed at that time, which offered to our sculptors opportunities before undreamed of for the utilization of their abilities besides providing for them the first opportunity to command the attention of the country by a display of their achievements. At the time of the Philadelphia Centennial Exposition American sculptural art was not yet in a position to avail itself of such opportunities. On the other hand, at the inception of the Louisiana Purchase Exposition it was felt that the sculptors of the country could render invaluable aid and upon an unprecedented scale, and their assistance was early sought and very fully secured, with the result, in the first place, of adding beauty and dignity to the exposition, and again, of great importance, that the influence for good of the exposition upon this art has already been plainly manifested. Among the best sculptures existing in the country to-day are direct products of its demands, executed for its embellishment, and now in the permanent collection of the St. Louis Museum of Fine Arts. The attention of the art world has been drawn to our national attainment in this field and a new estimate established of our artistic capabilities as a result of our work in sculpture at the exposition.

Almost equally apparent was the general advance of American art workers in all branches in command of technical methods and in truthfulness of artistic inspiration.

The organization of the forces available for effective participation in the work of perfecting a truly representative exposition of the art of so immense and productive a country as our own—a country, too, so abounding in differentiated circles of production—may well afford an interesting subject of study.

For the St. Louis Exposition a plan of committee and jury of selection organization for the United States art section was adopted, as follows:

First. A national advisory committee to be appointed, of representative individuals throughout the United States whose influence would be valuable in popularizing the department, who would give the executive the benefit of their advice and assistance, and through whose influence masterpieces might be obtained for the loan collection which had been planned as a part of the United States exhibit.

Second. Local advisory committees of technical men, to be appointed in important art centers in this country and abroad, to represent for the exposition the artists and art interests centered in their localities, to aid in the organization of the work and in the selection and care of exhibits to form the United States section, to enlist the interest and assistance of the local authorities, State commissions, etc., in the work where practicable, and generally to represent and further the interests of art representation, these advisory committees to be divided into groups or organized executive committees to deal with the different groups of the exhibit classification, as painting or sculpture, as conditions might warrant.

Third. Local juries of selection to be at the proper time made up in various centers where advisory committees should have been established, each such local jury to be constituted from the members of the local advisory committees, with the addition of delegated representatives from other centers to conserve uniformity in the standard of selection and put the stamp of national approval on the works chosen. These local juries should together constitute the national jury of selection and should act in conformity with the uniform rules to be prescribed.

Perhaps for the first time in the history of the work of juries of award at international expositions the number of jurors representing foreign sections was largely in excess of the number of jurors representing the home country—the United States—a condition of affairs which was a matter of surprise to experienced American jurors and of some anxiety lest prejudices might influence the results. Such, however, was happily not the case. With little exception the work of the jury was harmonious.

In recommending to the president of the exposition the appointment of jurors of awards to represent the United States section, as in every action of the department officials which bore upon the selection or judgment of exhibits, the fullest weight was given to the importance of an adequate expression of each phase of thought and effort, and this, I believe, was well appreciated by art workers. Certainly the completeness of the United States art representation indicated the general satisfaction of our artists with the manner of dealing with such problems. The experience of the department, both as to the United States and other sections, emphasized the value of the very complete consideration given the constitution and conduct of the international jury of awards.

In the St. Louis as in the Chicago Exposition the hope of the writer and of those with whom he was fortunately associated was to advance the cause of art. Through the clear-visioned policy of the art committee and others in control, it was possible to reach and consult all interests involved in the work of the department and to contribute to the furtherance of a friendly feeling on the part of art workers generally. We consistently sought this end by endeavoring to advance the plans and interests of all artists wherever possible, and numerous evidences of appreciation have been received from our coworkers and exhibitors at home and in various foreign national sections with keen pleasure.

Worthy of being placed upon record for its value in art work was the broad, liberal, outlook of the president and other officials of the St. Louis Exposition, the keen appreciation of large and permanent interests bound up with the development of art, which made it possible to better serve that cause in many ways. It may be proper to instance the expression by Mr. Francis, upon the occasion of an address to the groups of the international jury of awards for art, of the hope that we might have in the permanent

structure of the Art Palace a permanent home for the St. Louis Museum of Art as the most fitting memorial of the exposition. To recall his saying that such a result, dreamed of by the builders of the exposition from its early days, would in itself be worthy of all the effort expended to perfect the great enterprise. I believe that this recognition of the value and of the interests of American art came to be appreciated by artists and art lovers, and that through its helpful and harmonizing influence and its possibilities in furthering artistic interests not alone have been furthered the more immediate interests of the Louisiana Purchase Exposition, but also the advantage of expositions of the future and the general cause of American art education.

The need of European exhibitions adequately representative of American art was testified to by foreign commissioners at the St. Louis Exposition. Mr. Willy Martens, commissioner for Holland, said, comparing American art as he saw it then with the idea of it which he could obtain in Europe:

I should say that there has never been a display of American art as complete as we have seen here. This display has been quite a revelation to us foreigners.

Professor Doctor von Petersen, juror for Germany, spoke at length on one occasion to the international jury of awards for art of the desire of European lovers of art to learn what art message America has for the world. Lamenting the existing conditions, Professor von Petersen said:

I have been at the head of the international exhibitions at Munich upon several occasions, and at each of these times American art has been represented by excellent American painters working in Europe; but, although we have desired it very much, we have never been able to get a representation of the artists working here, nor even has there been any collective representation of American work, since the work even of the American artists who have appeared has been scattered among the productions of the other nations.

Provision should be made from public funds for national participation in such annual international exhibitions in European art centers. Representative national collections should be made up by selecting among the various types of artistic expression works representative of all groups of art workers both at home and abroad. This would result in a complete representation of what is being done at the present time in art by all workers of this country and would unquestionably enhance our prestige abroad.

This work might be accomplished under the supervision, as already suggested, of a bureau of expositions—experts in conjunction with a regularly established congressional committee—such as that already in existence known as the Congressional Committee on Industrial Arts and Expositions.

CHAPTER XI.

CURRENT TOPICS.

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COMPULSORY-ATTENDANCE AND CHILD-LABOR LAWS.

The following table has been revised by including the legislation of 1906. This legislation covers the following points:

In the District of Columbia the annual period of required attendance has been extended to include the full school term.

Georgia now forbids children under 10 to be employed in factory work under any circumstances; or (after January 1, 1907) under 12 unless necessary in certain circumstances for their own or their parents' support. After January 1, 1908, a specified degree of education or amount of school attendance will be exacted up to the age of 18 as a condition of employment.

A child-labor law has been passed in Iowa prohibiting the employment of children under 14 years of age in various specified occupations.

Kentucky, which previously prohibited the employment of children under 14 in factories, mines, etc., now broadens the prohibition so as to include several other kinds of employment, except in vacation time.

The Louisiana law now prohibits the employment of boys under 12 and girls under 14 in factories, etc., in cities and towns of 10,000 inhabitants or more.

In Massachusetts a standard is prescribed for those to come up to who are required to be able to read and write as a condition of employment.

In New York the minimum age for labor in or about mines has been fixed at 16 years. Females are not allowed to work in mines under any circumstances.

In Vermont the list of forbidden employments is extended to include railroad and quarry work, and no child under 16 is permitted to engage in any forbidden employment in school hours unless he has completed the 9-year elementary school course prepared by the State superintendent.

No attempt has been made in the table to note the provisions regulating the hours of labor of minors. Such regulations are now very general

Many States, in general terms, forbid, or permit only under restrictions, occupations dangerous to the life, limb, morals, or health of children. In some States the employment of children in begging, theatrical and circus exhibitions, on dangerous machinery, in occupations requiring the handling of intoxicating liquors, nightwork, etc., is specifically forbidden. Where the employments forbidden are not specifically enumerated the enforcement of such provisions of law is difficult, from lack of judicial interpretation as to what constitutes an employment dangerous to life, etc.

Statutory provisions relating to compulsory attendance and child labor.

(BROUGHT DOWN TO CLOSE OF 1906.)

COMPULSORY EDUCATION.				CHILD LABOR.[a]	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Alabama				10 years, in factories in all cases; 12, unless orphans, or children of the widowed or disabled; 12, in mines.	
Arizona	8–14	12 weeks; 6 consecutive	$5 to $25		
Arkansas				10 years, in all cases in manufacturing establishments; 12, unless to support a parent or self, as specified by law; 14, in mines; females not at all in mines.	No child under 14 may be employed in a manufacturing establishment unless he attends school 12 weeks each year and can read and write English.
California	8–14	Full term	First, not over $10 or 5 days' imprisonment; subsequent, $10 to $50, or 5 to 25 days, or both.	14 years, in any mercantile or manufacturing establishment, workshop, hotel, or as messenger, etc. Children 12 to 14, upon permit, may work if parents incapacitated or during vacation.	No minor under 16 may work for gain in school hours unless he can read and write English or attends night school.
Colorado	[b] 8–16	do	$5 to $25	14 years, in any underground works, mine, smelter, mill, or factory. No female may be employed in a coal mine.	Unlawful to employ children under 14 during school hours unless they have complied with the school-attendance law; under 16, unable to read and write, unless attending day or night school.
Connecticut	[c] 7–16	do	Not exceeding $5 each week of absence.	14 years, in any mechanical, mercantile, or manufacturing establishment.	Children under 14 may not be employed while school is in session. Children 14 to 16 can not leave school to be employed unless their education is satisfactory to the local or State school board.
Delaware				14 years, in any factory, workshop, or manufacturing establishment, except in canning industry, etc., or to support widowed mother.	No child 14 to 16 may be so employed unless he has attended day or night school 12 weeks the preceding year.
District of Columbia.	8–14	Full term	Not exceeding $20		
Florida				Children under 15 may not be employed more than 60 days without consent of legal guardian.	

[a] See remarks introductory to the table.
[b] Children 14 to 16 whose labor is necessary to their own or parents' support are excused.
[c] Not applicable to children over 14 lawfully employed to labor at home or elsewhere.

Statutory provisions relating to compulsory attendance and child labor—Continued.

	COMPULSORY EDUCATION.			CHILD LABOR.	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Georgia				10 years, in or about any manufacturing establishment; 12 years, after Jan. 1, 1907, except for support of self or parents in specified cases.	After Jan. 1, 1908, no child under 14 may be employed as in preceding column (with the exception there noted) unless able to write and has attended school 12 weeks the preceding year; under 18, unless so attended school.
Idaho	8–14	12 weeks; 8 consecutive	First, not less than $5; subsequent, $10 to $50, with costs.	14 years, in mines (constitution of State).	
Illinois	7–14	Full term, to be not less than 110 days of actual teaching.	$5 to $20 and costs; stand committed until paid. Penalty for false statements as to age or attendance, $3 to $20.	14 years, in any mercantile institution, factory, office, theater, elevator, etc., or as messenger or driver; 16, in or about any mine. No female may work in or about a mine.	No child 14 to 16 unable to read and write may be employed unless attending an evening school, if there is one. No child under 14 may be employed at any work for wages during the school term.
Indiana	[a] 7–14	Full term	$5 to $25, and, in discretion of court, imprisonment 2 to 90 days.	14 years, in any manufacturing or mercantile establishment, mine, quarry, laundry, renovating works, bakery, or printing office. No female may work in a mine.	Children under 16, unable to read and write English, may not be employed in foregoing employments except in vacation of public schools.
Iowa	[a] 7–14	16 consecutive weeks	$3 to $20	14 years in any mine, factory, mill, shop, laundry, packing house, elevator, or store where more than 8 persons are employed.	
Kansas	[a] 8–15	Full term [b]	$5 to $25	14 years, in any factory or packing house or in or about any mine; 16, in any dangerous, etc., employment.	No minor under 16, may work in a coal mine unless he can read and write and has attended school 3 months in the year.
Kentucky	7–14	8 consecutive weeks; full term in cities of first, second, third, and fourth classes.	First, $5 to $20; subsequent, $10 to $50.	14 years, in any workshop, factory, mill or mine, unless the child has no other means of support.	No child under 14 to be employed in any mercantile, laundry, or printing establishment, or as messenger, except during vacation.
Louisiana				12 years (boys), 14 (girls), in any factory, mill, warehouse, or workshop in cities of 10,000 or more.	Children under 14 may not be employed in foregoing employments, nor in clothing, dressmaking, or millinery establishments, unless they have attended school 4 months in preceding year.
Maine	7–15	Full term	Not exceeding $25, or imprisonment not exceeding 30 days.	12 years, in any manufacturing or mechanical establishment.	Children under 15 shall not be employed in any manufacturing or mechanical establishment, except during vacation, unless they have attended school 16 weeks during preceding year.

Maryland[c]	[d] 8–12	....do	Not exceeding $5	14 years, in mills and factories (except canning establishments), unless self, widowed mother, or invalid father solely dependent upon such employment. 19 counties exempt from law.	No minor, 12 to 16, unable to read and write English may be employed where there is an evening school unless attending that or another school.
Massachusetts	[e] 7–14	....do	Not exceeding $20	14 years, in factories, workshops, or mercantile establishments.	Children under 14 may not be employed at any work for wages during school hours; from 14 to 16 may not be so employed in any factory, workshop, or mercantile establishment if unable to read and write.[f]
Michigan	[a] 7–15	....do	Fine of $5 to $50, or imprisonment 2 to 90 days, or both.	14 years, in any manufacturing or mercantile establishment, workshop, laundry, store, office, hotel, messenger service, etc.	Children 14 to 16, unable to read and write English, may not be employed.
Minnesota	8–18	....do	First, $25; subsequent, $25 to $50.	14 years, in factories, workshops, or mines.	Children under 14 years may not be employed in mercantile establishments, telegraph, telephone, or public messengers companies, except during vacation; under school age (16 years), in any occupation unless they have attended school the prescribed period; under 16, unable to read and write English, in any indoor occupation (except in vacation) unless attending day or evening school.
Missouri	[g] 8–14	Not less than ½ of term	$10 to $25, or imprisonment 2 to 10 days, or both.	14 years, in mines, manufacturing or mechanical establishments; no females in mines.	No child 8 to 14 may be employed in any way in school hours unless he has complied with the attendance law. No boy under 16 may work in a mine unless he can read and write.
Montana	[g] 8–14	Full term; in no case less than 16 weeks.	$5 to $20	16 years, in mines or underground works.	Children under 14 not to be employed during school sessions unless they have completed the studies required by law; from 14 to 16, if unable to read and write English.
Nebraska	7–15	Two-thirds of school term; in no case less than 12 weeks.	$5 to $25 (on truant officer)	10 years, in manufacturing, mechanical, industrial, or mercantile establishments.	Foregoing employments unlawful for children under 14 (except during vacations) unless they have attended school 20 weeks the preceding year.
Nevada	8–14	16 weeks; 8 consecutive	First, $50 to $100; subsequent, $100 to $200; with costs.		

[a] Inclusive.
[b] 8 weeks for children over 14 who can read and write English and are at work to support themselves or others.
[c] The provisions tabulated for Maryland (except in fifth column) are those of the act of 1902, whose operation is limited to Baltimore City and Allegany County.
[d] To 16 unless regularly employed to labor at home or elsewhere.
[e] To 16 if wandering about public places without lawful occupation, or if unable to read and write.
[f] Must be able to so read and write as is required to enter the second grade in 1906, third in 1907, and fourth in 1908 and after.
[g] To 16 if unemployed.

Statutory provisions relating to compulsory attendance and child labor—Continued.

COMPULSORY EDUCATION.				CHILD LABOR.	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
New Hampshire	a 8–14	Full term	First, $10; subsequent, $20	12 years, in any manufacturing establishment.	No child under 14 may be employed during school sessions, nor under 16 if unable to read and write English. No minor unable to read and write English may be employed unless attending day or evening school, if any is held.
New Jersey	7–14	do	"Punishable as a disorderly person."	14 years, in factories, workshops, mills, or manufacturing establishments; also mines.	Children under 15 must have attended school 12 weeks the preceding year as a condition of employment.
New Mexico	7–14	3 months	$5 to $25, or imprisonment not exceeding 10 days.		
New York	8–16	Full term (October 1 to June 1) between ages of 8 and 14; when unemployed, between 14 and 16.	First, not exceeding $5; subsequent, not exceeding $50, or imprisonment not exceeding 30 days, or both fine and imprisonment.	14 years, in factories; if 14 to 16, the child must have attended school 130 days the preceding year, and be able to read and write English, and cipher. Similar provisions apply, in places of over 3,000 population, to work in mercantile establishments, business offices, restaurants, hotels, express or messenger service, except for children over 12 in small places during vacation. For work in or about mines 16 years is the minimum. No female may work in a mine.	Unlawful to employ in any business or service child under 14 during school term; 14 to 16, unless has attended 130 days preceding year, and can read and write English, and cipher, or (in first and second class cities) has completed elementary course or attends evening school 16 weeks a year. See preceding column.
North Carolina	(b)			12 years, in any factory or manufacturing establishment (does not apply to oyster canning and packing); 12 years, in mines employing over 10 men (boys).	
North Dakota	8–14	Full term	$5 to $20 (on school official)	12 years, in mines, factories, and workshops (constitution of State).	Children under 14 may not be employed in any manner during school hours unless they have attended school 12 weeks during the year.
Ohio	a 8–14	Full term; in no case less than 24 weeks.	$5 to $20; on default, imprisonment from 10 to 30 days.	14 years, in mines, factories, workshops, mercantile or other establishments.	No child under 14 may be employed in any other manner during school sessions; or between 14 and 16 if unable to read and write English; or in mines during school term if under 15.

Oregon	[c] 8–14	Full term	$5 to $25	14 years, in any factory, store, workshop, in or about any mine, or in the telegraph, telephone, or public messenger service.	Foregoing employments forbidden to any child 14 to 16 unless attended school 160 days preceding year and can read English. No child under 14 may be employed in any work for compensation during school hours.
Pennsylvania	[d] 8–16	Full term; but the school board of each district has power to reduce this to not less than 70 per cent of the term.	First, not exceeding $2; subsequent, not exceeding $5; on default, imprisonment; first, not over 2 days; subsequent, not over 5.	14 years, in any employment, except domestic, coal mining, or farm labor; 16 years in coal mines; 14 years in or about the outside workings of coal mines. Girls may not work in or about coal mines.	No child 14 to 16 may be employed unless he can read and write English and has complied with the school laws.
Rhode Island	[e] 7–15	Full term	Not exceeding $20	13 years before, 14 after Dec. 31, 1906, in any factory, manufacturing or business establishment.	Children under 13 may not be employed except during school vacations.
South Carolina				10 years after May 1, 1903; 11 after May 1, 1904; 12 after May 1, 1905, in any factory, mine, or textile establishment, except that certain self-dependent children may work in the latter.	Children may work in textile establishments in June, July, and August if they have attended school 4 months during the year and can read and write.
South Dakota	8–14	12 weeks, 8 consecutive	$10 to $20 and costs; stand committed till paid.	14 years, in mines	No child 8 to 14 to be employed during school hours unless he has attended school 12 weeks during the year.
Tennessee	[f]			14 years, in workshops, factories, or mines.	
Texas				12 years, in mills, factories, manufacturing or other establishments using machinery; 16 years in mines, distilleries, or breweries.	Unlawful to employ children 12 to 14 who can not read and write English, in mills, factories, etc., certain self-dependent children excepted.
Utah	8–16	20 weeks, 10 consecutive; in cities of the 1st and 2d class 30 weeks, 10 consecutive.	First, not exceeding $10; subsequent, not exceeding $30, with costs.	14 years, in mines (constitution of State).	
Vermont	[g] 8–15	Full term	$5 to $25	12 years, for any railroad company or in any mill, factory, quarry, or workshop, or carrying messages.	No child under 16 who has not completed the 9-year school course may be employed in any railroad, factory, mine, or quarry work, or in delivering messages, except out of school hours.
Virginia				12 years, "in any manufacturing, mechanical, or mining operation."	

[a] To 16 if unable to read and write English.
[b] Four counties and the city of Washington are under special compulsory attendance laws.
[c] To 16 if unemployed.
[d] Not applicable to children over 13 who can read and write English and are regularly employed in useful service.
[e] Not applicable to children over 13 who are lawfully employed.
[f] In 1905 a compulsory attendance act was passed applying only to Claiborne and Union counties.
[g] Children over 15 or under 8, when once enrolled, must attend the full term they are enrolled for.

Statutory provisions relating to compulsory attendance and child labor—Continued.

COMPULSORY EDUCATION.				CHILD LABOR.	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Washington	8-15	Full term	Not over $25	14 years, in mines (boys); 12 (boys), in the outside workings of a colliery; 14, in any factory, mill, workshop, or store, except (12 to 14) in specified cases of need.	Children under 15 may not be employed in manufacturing, mechanical, or mercantile establishments, or by any corporation, while the schools are in session, unless excused by the school superintendent.
West Virginia	8-14	20 weeks	First, $2; subsequent, $5	12 years, in mines, factories, workshops, mercantile or manufacturing establishments.	No child under 14 shall be so employed during school term if it hinders regular attendance.
Wisconsin	[a] 7-14	Full term; in cities, not less than 8; elsewhere not less than 5 calendar months.	$5 to $50, or imprisonment not over 3 months.	12 years, in any occupation; 14, in factories, workshops, bowling alleys, barrooms, beer gardens, mines; 14 to 16, in any occupation without specified written permit; 18, as messengers (females).	Children 12 to 14 may not be employed in any occupation, except during school vacations, by specified written permit, in stores, offices, hotels, mercantile establishments, laundries, telegraph, telephone, or public messenger service, where they reside.
Wyoming	[b] 6-21	3 months	Not exceeding $25	14 years, in mines; females may not work in mines. (Constitution.)	
United States laws (for Territories).				12 years, in the underground workings of any mine.	

[a] To 16, if not regularly and usefully employed at home or elsewhere.
[b] Penalty only for child 7 to 16, or one living idly and loitering about public places.

CONSOLIDATION OF SCHOOLS AND TRANSPORTATION OF PUPILS.

[For further information on this subject see the Annual Report of this Office for 1894-95, Vol. II, pp. 1469-1482, 1895-96, II, 1353-1358; 1898-99, I, 526-529; 1899-1900, II, 2581-2584; 1901, I, 161-213, and II, 2306-2402, 1902, II, 2353-2360.]

Per cent of total common school expenditure used for transportation.

School year.	Maine.		Vermont.		Massachusetts.		Connecticut.		New Jersey.	
	Expended for transportation.	Per cent of total.	Expended for transportation.	Per cent of total.	Expended for transportation.	Per cent of total.	Expended for transportation.	Per cent of total.	Expended for transportation.	Per cent of total.
1888-89					$22,118	0.29				
1889-90					24,145	29				
1890-91					30,649	.30				
1891-92					38,726	.42				
1892-93					50,590	52				
1893-94					63,618	.64				
1894-95			$12,941	1.41	76,605	.72				
1895-96	$47,739	2.91	18,429	1.73	91,136	77				
1896-97	28,818	1.81	18,521	2.04	105,317	.85				
1897-98	36,961	2.41	18,306	1.96	123,032	.90	$11,416	0.38		
1898-99	50,118	3.20	20,881	2.14	127,400	92	10,762	.34		
1899-1900	51,050	2.98	26,492	2.47	141,754	1.03	9,817	.31		
1900-1901	54,037	3.13	32,034	2.90	151,773	1.07	12,838	38	$4,421	0.06
1901-2	62,179	3.46	36,563	3.34	165,597	1.09	16,101	.45	6,435	.09
1902-3	65,725	3.37	37,356	3.41	178,298	1.18	17,717	50	7,433	.10
1903-4	74,980	3.60	43,687	3.71	194,967	1.19			8,727	.10
1904-5	77,858	3.85			213,221	1.18			9,701	.10

Annual expenditure per pupil transported.

School year.	Vermont.		Connecticut.	
	Number of pupils transported.	Average cost.	Number of pupils transported.	Average cost.
1894-95	921	$14.05		
1895-96	1,347	13.68		
1896-97	1,309	14.15		
1897-98	1,574	11.63	849	$13.45
1898-99	1,652	12.64	773	13.91
1899-1900	2,062	12.85	639	15.38
1900-1901	2,540	12.61	720	16.46
1901-2	2,517	14.53	946	17.03
1902-3	2,636	14.17	1,148	15.43
1903-4	2,669	16.37		

FREE TEXT-BOOKS AND SUPPLIES.

The following table gives certain particulars of the laws relating to free text-books and supplies in those States which have statutory provision upon the subject:

State.	Law mandatory or optional?	What shall or may be loaned free?	Limited to what pupils, grades, branches, or expenditure?
Maine	Mandatory	Schoolbooks, apparatus, and appliances.	Not limited.
New Hampshire	do	Text-books and other supplies	Do.
Vermont	do	Appliances, supplies, and text-books.	To certain specified elementary branches.
Massachusetts	do	Text-books and other school supplies.[a]	Not limited.
Rhode Island	do	Text-books and other school supplies.	Do.
Connecticut[b]	Optional	do	Do.
New York	do	Text-books	To pupils of schools in union free school districts.
New Jersey	Mandatory	Text-books and school supplies.	Not limited.
Pennsylvania	do	Books and school supplies	Do.
Delaware	do	Text-books	To pupils (including colored) of public schools outside of Wilmington.
Maryland	do	do	Introduced into the grades successively, beginning with the first. Annual expenditure limited to $150,000, appropriated by the State.
District of Columbia[c]	Optional	Text-books and supplies	To grades below high school.
West Virginia	do	Text-books	Not limited.
Ohio	do	Schoolbooks	To the elementary branches specified in the compulsory-attendance law.
Michigan	do	Text-books	To certain specified elementary branches.
Wisconsin	do	do	Not limited.
Minnesota	do	do	Do.
Iowa	do	do	Do.
North Dakota	do	Books and supplies	Do.
South Dakota	do	Schoolbooks	Do.
Nebraska	Mandatory	Text-books and school supplies.	Do.
Kansas	Optional	Text-books	Do.
Wyoming	Mandatory	Text-books and school supplies.	Do.
Colorado	Optional	Text-books	Do.
Utah	Mandatory	Text-books and supplies	To pupils of schools below high school.
Idaho	Optional	Text-books	Not limited.
Washington	do	do	Do.

[a] Including tools, implements, and materials used for instruction in the use of tools and cooking.
[b] An act of 1905 requires every town that has not hitherto voted on the question of free text-books to take such vote.
[c] No law upon the subject. Congress makes annually the necessary appropriation upon the estimate of the Board of Education.

TEMPERANCE INSTRUCTION IN THE PUBLIC SCHOOLS.

The following table shows the leading provisions of the statutes of the several States and Territories relating to temperance instruction in the public schools:

EXPLANATION OF CHARACTERS.

M—The study of physiology and hygiene, with special reference to the effects of alcoholic drinks and narcotics upon the human system, is Mandatory in the public schools.

TT—It must be Taught in the same manner and as Thoroughly as other required branches.

TE—Teachers must pass a satisfactory Examination in this subject as a condition of employment.

A—The study must be taught in All schools supported in whole or in part by public funds.

AA—It is required of All pupils in All schools.

PRB—Pupils able to Read must be taught by means of text Books on the subject.

1/5-20 (or 1/4-20)—The text-books on physiology for primary and intermediate schools must give one-fifth (or one-fourth) their space to this subject, and those for high schools at least 20 pages.

SA—Text-books must give Space Adequate to the subject.

PE—Pupils must be Examined and tested in their knowledge of this subject before being promoted to higher grades.

SR—County or city Superintendent must Report to State superintendent to what extent this law has been complied with.

TC—Teacher must Certify in school register before returning same at the end of the term, whether this law has been complied with in his school or grade.

TN—The subject must be Taught in Normal schools, teachers' training classes, and institutes.

P—The statute specifies a Penalty for violation. In other States it is punishable under some general penal statute.

n—A minimum Number of lessons per week and year is specified.

*Above primary.

†All pupils whose capacity will admit.

‡Above the fourth grade.

State or Territory.	Statutory provisions.									
Alabama	M	TT	TE	AA						
Alaska	M	TT	TE	AA	PRB					P
Arizona	M	TT	TE	AA	PRB					P
Arkansas	M		TE	AA				SR		
California	M			AA						
Colorado	M	TT		AA	PRB					P
Connecticut	M		TE*						TN	P
Delaware	M		TE	AA	PRB					P
District of Columbia	M	TT	TE	AA	PRB					P
Florida	M		TE							
Georgia	M	TT	TE	AA				SR		
Idaho	M		TE*							
Illinois	M	TT‡	TE	AA	PRB	1/5-20			TN	P
Indiana	M		TE	AA						P
Indian Territory	M	TT	TE	AA	PRB					P
Iowa	M	TT	TE	AA				SR		P
Kansas	M		TE	AA						
Kentucky	M	TT								
Louisiana	M		TE	A						
Maine	M		TE	AA						
Maryland	M	TT		A*	PRB					
Massachusetts	M	TT		AA						
Michigan	M	TT		AA	PRB	1/4-20		TC		P
Minnesota	M		TE					SR		P
Mississippi	M		TE							
Missouri	M		TE	A						
Montana	M									
Nebraska	M		TE	A						
Nevada	M									
New Hampshire	M	TT		A*						P
New Jersey	M	TT	TE	AA	PRB	SA				P
New Mexico	M	TT	TE	AA	PRB					P
New York	M	TT‡	TE	A	PRB	1/5-20	PE	SR	TN	P
North Carolina	M									
North Dakota	M	TT	TE							
Ohio	M	TT	TE	AA			PE		TN	P
Oklahoma	M	TT	TE	AA	PRB					P
Oregon	M	TT		AA	PRBn			TC		
Pennsylvania	M	TT	TE	AA				SR		P
Rhode Island	M			A						
South Carolina	M			A						
South Dakota	M	TT	TE	AA	PRB	1/4-20		SR		P
Tennessee	M	TT	TE	AA						
Texas	M		TE	A						
Utah	M			A						
Vermont	M									
Virginia	M	TT								
Washington	M									P
West Virginia	M	TT	TE	AA						P
Wisconsin	M		TE	AA						
Wyoming	■		TE	A*				SR		P

SUNDAY SCHOOL STATISTICS OF NORTH AMERICA.

[From the report of Marion Lawrence, general secretary for the Eleventh International Sunday School Convention, Toronto, Canada, June 23-27, 1905.]

Statistics presented to the several international Sunday school conventions.

	Sunday schools.	Teachers.	Scholars.	Total.
[illegible] May 11-13, 1875:				
United States	64,871	733,060	5,790,683	6,543,743
Canada	4,401	35,745	271,381	307,126
Atlanta, Apr. 17-19, 1878:				
United States	78,046	853,100	6,504,054	7,357,154
Canada	5,395	41,693	339,943	381,636
Toronto, June 22-24, 1880:				
United States	84,730	932,283	6,820,835	7,753,118
British America	5,640	42,912	356,330	399,242
Louisville, Apr. 11-15, 1884:				
United States	98,303	1,043,718	7,668,833	8,712,851
British America	5,213	45,511	387,966	433,477
Chicago, June 5, 1887:				
United States	99,860	1,108,265	8,048,462	9,156,727
British America	6,448	82,938	440,983	493,921
Pittsburg, June 26-27, 1890:				
United States	108,939	1,151,340	8,649,131	9,800,471
British America	7,020	58,086	407,113	555,199
[illegible], Aug. 31-Sept. 2, 1893:				
United States	123,173	1,305,939	9,718,432	11,024,371
British America	8,745	71,796	599,040	670,837
Boston, June 25-30, 1896:				
United States	132,639	1,390,508	10,890,092	12,280,600
British America	9,450	79,861	666,714	746,575
[illegible], July 26-30, 1899:				
United States	137,293	1,399,711	11,327,858	12,727,569
British America	10,827	81,874	690,208	732,082
Mexico	319	723	9,259	9,982
Denver, June 26-30, 1902:				
United States	139,501	1,417,380	11,474,441	13,151,001
Canada	10,220	82,156	685,870	780,664
Newfoundland and Labrador a	353	2,374	22,766	25,140
Bermuda	319	723	9,259	10,082
West Indies	2,306	10,709	111,335	122,104
Central America a	231	577	5,741	6,318
Toronto, June 23-27, 1905:				
United States	140,519	1,451,855	11,329,253	13,200,114
Canada	10,750	85,632	694,235	790,506
Newfoundland and Labrador a	353	2,374	22,766	25,140
Bermuda	319	1,266	13,797	15,063
West Indies a	2,306	10,709	111,335	122,104
Central America	231	577	5,741	6,318
North America	154,503	1,552,473	12,167 127	14,166,905

a 1896 statistics.

Total Statistical Report made to the Eleventh International Sunday School Convention, Toronto, Canada, June 23-27, 1905.

[It is not claimed that these statistics are complete or accurate. They are the sum of such statistics as have been sent in from the States, Provinces, and Territories. They may safely be regarded as conservative. All reports made to the international convention include the Sunday schools of the colored people.]

United States.	Sunday schools.	Membership.			Gain since last report.	Loss since last report.	Date of this report.	Remarks.
		Officers and teachers.	Scholars.	Total enrollment.a				
Alabama	4,316	18,685	168,172	271,390	20,140	[illegible]	1905	Partly estimated.
Alaska	39	157	2,047	2,301	[illegible]	[illegible]	1902	
Arizona	97	780	6,943	7,983	1,553	[illegible]	1905	Fairly accurate.
Arkansas	2,770	31,600	240,810	281,105	110,143	[illegible]	1905	Do.
California:								
North	1,181	11,862	93,390	110,340	28,977	[illegible]	1905	Do.
South	497	5,687	65,809	76,403	17,066	[illegible]	1905	Do.
Colorado	921	9,535	73,183	92,280	14,977	[illegible]	1905	Do.
Connecticut	1,050	16,620	113,527	130,877	[illegible]	16,123	1905	Do.
Delaware	400	5,405	42,937	49,969	4,637	[illegible]	1905	Complete.

a Where the total enrollment column exceeds the sum of the two preceding columns, the home department membership is included.

Triennial Statistical Report made to the Eleventh International Sunday School Convention, Toronto Canada, June 25–27, 1905—Continued.

United States.	Sunday schools.	Membership.			Gain since last report	Loss since last report	Date of this report.	Remarks.
		Officers and teachers.	Scholars.	Total enrollment				
District of Columbia.	252	5,825	46,667	55,313			1902	
Florida	2,400	12,119	94,870	106,989			1898	
Georgia	4,616	35,778	253,410	289,188			1899	
Idaho	205	1,445	11,527	13,254			1902	Estimate.
Illinois	7,878	94,112	607,630	824,371	12,217		1905	Accurate.
Indian Territory	1,200	7,200	60,000	67,200	47,865		1905	Estimate.
Indiana	5,277	68,591	517,146	599,525	38,357		1905	Fairly accurate.
Iowa	4,458	45,887	317,401	379,643		a62,453	1905	Do
Kansas	4,395	41,359	296,273	349,874	42,020		1905	Do.
Kentucky	3,181	24,591	205,969	236,573	1,833		1905	Do.
Louisiana	620	4,000	55,000	60,350			1902	Estimate.
Maine	1,200	8,540	59,516	74,519		48,894	1905	Fairly accurate.
Maryland	1,982	26,028	203,997	234,108		6,852	1905	Do.
Massachusetts	1,909	37,131	259,727	323,817		12,308	1906	Accurate.
Michigan	4,538	49,011	370,707	423,133			1902	
Minnesota	1,984	19,272	178,614	200,708	4,745		1905	Fairly accurate.
Mississippi	2,025	11,444	101,280	112,724			1902	Estimate.
Missouri	6,768	64,520	529,920	599,543		97,006	1905	Fairly accurate.
Montana	321	2,247	17,334	19,581			1899	Estimate.
Nebraska	2,763	30,764	168,764	200,988	10,354		1905	Partly estimated.
Nevada	42	266	2,208	2,544		1,666	1905	Fairly accurate.
New Hampshire	574	6,867	47,321	54,050		2,113	1905	Do.
New Jersey	2,334	39,404	307,004	368,332	2,302		1905	Accurate.
New Mexico	96	659	5,020	6,035	1,924		1905	Fairly accurate.
New York	5,951	98,000	911,619	1,067,955		177,208	1905	Do.
North Carolina	7,000	40,000	390,000	430,000	40,888		1905	Estimate.
North Dakota	484	7,868	50,768	71,417	5,561		1905	Fairly accurate.
Ohio	8,057	121,032	749,033	908,629	53,517		1905	Accurate.
Oklahoma	1,340	13,480	79,016	93,347	34,347		1905	Fairly accurate.
Oregon	1,100	14,300	90,000	106,010	11,262		1905	Estimate.
Pennsylvania	10,158	158,772	1,285,228	1,491,812	21,876		1905	Accurate.
Rhode Island	344	6,150	44,419	54,402		3,436	1905	Do.
South Carolina	4,703	42,080	340,363	382,808			1899	
South Dakota	1,007	7,018	48,911	57,361	2,983		1905	Fairly accurate.
Tennessee	4,870	39,849	295,266	295,215			1902	
Texas	5,501	42,923	343,024	386,943			1902	Estimate.
Utah	121	902	8,799	10,130	1,832		1905	Fairly accurate.
Vermont	677	6,975	43,716	55,336		a6,764	1905	Do.
Virginia	4,800	55,400	330,000	388,440			1902	Estimate.
Washington	1,617	12,916	107,109	122,223	27,575		1905	Fairly accurate.
West Virginia	3,467	25,901	181,194	209,330	35,840		1905	Do
Wisconsin	6,000	20,000	400 000	421,060		50,662	1905	Estimate.
Wyoming	124	885	6,760	7,832		135	1905	Fairly accurate.
Hawaii	230	1,413	15,840	17,253			1898	
Philippines								
Porto Rico		(b)	(b)	(b)				
Total	140,549	1,451,855	11,329,253	13,209,114	618,871	485,708		
CANADA.								
Alberta	200	1,500	15,000	16,540	9,800		1905	Estimate.
Assiniboia	500	1,400	12,000	13,400			1901	Do.
British Columbia	150	2,000	15,000	17,100			1902	Do.
Manitoba	710	5,509	39,812	47,333		1,472	1905	Fairly accurate.
New Brunswick	1,073	6,613	51,055	60,338	4,559		1905	Do.
Nova Scotia	1,261	8,513	67,767	79,197		10,768	1905	Partly estimated.
Ontario	6,089	54,011	437,087	501,068	7,545		1905	Fairly accurate.
Prince Edward Island.	202	1,202	9,325	11,246		940	1905	Do.
Saskatchewan	20	100	1,000	1,100			1905	Estimate.
Quebec	545	4,784	36,189	43,224		5,812	1905	Fairly accurate.
Total	10,750	85,632	684 235	790,566	21,804	38,992		
Newfoundland and Labrador.	353	2,374	22,766	25,140			1898	Accurate.
Mexico	434	1 266	13,797	15,063	4 961		1905	Fairly accurate.
West Indies	2,300	10,769	111,335	122,104			1898	Estimate.
Central America	231	577	5,741	6,318			1898	Do.
Total	3,324	14,986	153,639	168 625	4 961			
Grand total	154 593	1 552,473	12,167,127	14 168,305	645,636	524,700		

a Protestant evangelical schools only reported—this accounts largely for decrease.
b Included in the West Indies.

Sunday school statistics of all nations.

[The following statistics were compiled for the Centennial of the Sunday School Union of London, 1903. They were revised for the World's Sunday School Convention, held at Jerusalem in 1904. The statistics from North America are revised to date.]

Country.	Sunday schools.	Teachers.	Scholars.	Total.
Europe:				
Great Britain and Ireland	53,590	674,123	7,300,340	7,974,463
Austria-Hungary	239	643	10,572	11,215
Belgium	83	403	4,616	5,019
Bulgaria	35	140	1,576	1,716
Denmark	990	4,610	72,800	77,410
Finland	7,611	12,928	165,140	178,068
France	1,475	3,876	61,200	65,076
Germany	7,742	39,872	826,341	866,213
Greece	4	7	180	187
Holland	2,020	2,092	206,000	211,092
Italy	261	823	12,160	12,983
Norway	1,000	3,600	75,000	78,600
Portugal	18	70	1,419	1,489
Russia	83	785	15,679	16,464
Spain	90	181	5,419	5,600
Sweden	6,000	20,300	300,000	320,300
Switzerland	1,762	7,490	122,567	130,057
Turkey in Europe	30	170	1,420	1,590
Asia:				
India, including Ceylon	8,719	14,952	333,776	348,728
Persia	107	440	4,876	5,316
Siam	16	64	809	873
China	105	1,053	5,264	6,317
Japan	1,074	7,505	44,035	51,540
Turkey in Asia	516	4,250	25,833	30,083
Africa	4,246	8,455	161,394	169,849
North America:				
United States	140,519	1,451,855	11,329,253	13,209,114
Canada	10,750	85,632	684,235	790,566
Newfoundland and Labrador	353	2,374	22,766	25,140
West Indies	2,306	10,769	111,335	122,104
Central America	231	577	5,741	6,318
Mexico	434	1,266	13,797	15,063
South America	350	3,000	150,000	153,000
Oceania:				
Australasia	7,458	54,670	595,031	649,701
Fiji Islands	1,474	2,700	42,909	45,609
Hawaiian Islands	230	1,413	15,840	17,253
Other islands	210	800	10,000	10,800
Total	262,131	2,426,898	22,739,323	25,614,916

Triennial report on condition of organization made to the Eleventh International Sunday School Convention, Toronto, Canada, June 23–27, 1905.

[It is not claimed that these statistics are complete or accurate. They are the sum of such statistics as have been sent in from the States, Provinces, and Territories. They may safely be regarded as conservative. Quite a number of States have done more or less house visitation, but the reports were too incomplete to justify printing. Eighty-eight cities, however, have been canvassed.]

State and country.	Organization.					Primary unions.	Primary departments with separate rooms.	Home departments.	Membership home departments.	Normal classes.	Membership normal classes.	Normal graduates past year.	Cradle rolls.	Membership cradle rolls.	Schools observing decision day.	I. B. R. A. membership.	Paid workers full time.	Paid workers part time.	Teacher meetings.	Scholars joining church.
	Counties.	Counties organized.	Banner counties.	Cities organized.	Conventions held past year.															
UNITED STATES.																				
Alabama	67	51	13		200	28	109	82	4,829			14	152				3			
Alaska Territory[a]																				
Arizona Territory	13	3			5		23	9	260	0	91	5	5	86	9				14	303
Arkansas	75	43	9	2	117	1	25	75	8,605	5	21	1	90	1,250	20		1		26	1,500
California																				
North	48	37	5		71	2	148	199	5,062	80	680		275	4,607		6	1		382	2,997
South	9	9	3	1	20	5	199	101	4,817	23	374	13		3,292	94		2		48	1,564
Colorado	59	33	10	2	120	3	220	129	4,922	34	487	20	221	5,500	139		2		148	2,337
Connecticut	8	8	8	3	26		382	235	9,730	49		9	145	4,140			1		50	2,461
Delaware[b]	3	3	1	1	20		119	53	1,627	18	100	18	76	1,803	95	672	1		33	1,835
District of Columbia[b]	1	1	1		2	1		40	2,821										39	
Florida	45	32	9		5											31				
Georgia	137	128			100															
Idaho	21	2			2	1	31													
Illinois[b]	102	102	40		1,670	21		976	32,029	63		553	981	17,873			6	3	1,066	22,129
Indian Territory	7			5	1			3					5							
Indiana	92	88	46	5	905	4	978	444	13,788	64	1,000	28	399	9,376	341		3		533	13,600
Iowa[b]	99	99	29	13	718	7	1,100	505	16,375	282	2,471	175	629	12,252	481	78	4		486	12,706
Kansas[b]	105	104	38		720	5	970	484	12,242	253	3,200	15	480	8,950		244	2	1	393	11,585
Kentucky	119	100	32		366	3	214	145	6,013	48	485		137	2,527	50		3	2	150	2,500
Louisiana	59	5	2		19	2	50	100	1,350	15	150		84	2,059					60	
Maine[b]	16	16			150		300	90	6,455				156	1,490	46		1		51	1,470
Maryland	23	21		1	73	1		70	3,483			103	278	4,201			3	1	450	
Massachusetts	13	13	13		100	19		682	26,959			109	368	7,809	277		3		355	6,524
Michigan	83	70	13		550	5	500	170	3,415	125	590						2		550	
Minnesota	84	69	3		102	7	1,091	44	2,822	11	134	14	139	1,896	141		4			1,384
Mississippi	74	43			44	7														
Missouri	115	84		7	85	14	230	111	5,103	122		1				231	2	3	98	2,252
Montana	27	10			3															
Nebraska	90	70	6	1	200	5	1,328	178	1,460	70	900	30	186	2,384		94	3			2,167

[a] Not organized.

[b] Complete organization: that is, every county organized and holding conventions annually.

Triennial report on condition of organization made to the Eleventh International Sunday School Convention, Toronto, Canada, June 23–27 1905—Continued.

State and country	Organization.						Primary departments with separate rooms.	Home departments.	Membership home departments.	Normal classes.	Membership normal classes.	Normal graduates past year.	Cradle rolls.	Membership cradle rolls.	Schools observing decision day.	I. B. R. A. membership.	Paid workers full time.	Paid workers part time.	Teacher meetings.	Scholars joining church.
	Counties	Counties organized.	Banner counties.	Cities organized.	Conventions held past year.	Primary unions.														
UNITED STATES—continued.																				
Nevada	15				3		12	3	50	1	15		4	65	1					45
New Hampshire [a]	10	10	1	1	65		255	107	5,862	19	131		158	2,973	36	756	1	1	47	813
New Jersey [a]	21	21		3	109	20	1,210	544	20,934	131	1,483	17	618	13,913	413	80	2			12,081
New Mexico	24	1			2	1	21	9	356	2	17		14	205	8				10	239
New York [a]	61	61		6	1,561	23	2,013	1,097	60,336	358	6,048	31	979	21,444	619		1	4	895	18,061
North Carolina	97	34	3		60	1											1			
North Dakota	41	37		2	86	2	590	176	3,781	38			62	902	42		1	1		804
Ohio [a]	88	88	88	6	3,000	26	1,984	1,286	38,564	660	3,554	170	1,552	23,018	1,006	146	15	2	1,230	33,385
Oklahoma [a]	26	26	5	3	400	1	58	70	851	10	65	6	82	1,196	23		1		93	2,046
Oregon	33	16			6	3		57	1,710	15	150	75	40	600						1,078
Pennsylvania [a]	67	67	30	3	900	18	2,280	1,119	47,812		2,395	1,040	1,461	39,513		1	5	32		35,475
Rhode Island [a]	12	12	12	4	30	1	217	114	3,832	31	474	474	81	1,447		3	2			801
South Carolina	41	25			25	2		5	125											
South Dakota	53	29	1	1	30		60	26	1,432	4	48				12	500	1		28	504
Tennessee	96	84	12		90	11														
Texas	244	29	1	3	75	5		96	2,630	35	386	3	80	2,337	33	25	2	1	77	1,893
Utah	27	7			5	1	60	16	429	6	101		22	395	12	5			10	187
Vermont [a]	14	14	1	2	81	1	271	135	4,645	12	109	2	79	1,673	23	403	1		50	1,100
Virginia	100	21		1	50	3														
Washington	37	34			57	5		80	2,198	29	396		118	1,911	113		1	1		2,792
West Virginia	55	37	7		164	4	100	65	2,235	29	309	49	97	1,967		120	1	1	86	2,769
Wisconsin	71	35	4	3	36	19	275	51	1,060	15	278		122	2,000	40		2		79	619
Wyoming	13	4			5		30	9	178	9	74		19	287	17				8	357
Hawaii [b]																				
Philippines [b]																				
Porto Rico [b]																				
Total	2,840	1,929	440	79	13,237	288	17,513	10,089	373,868	3,652	26,788	2,975	10,432	307,131	4,003	3,404	83	53	7,544	204,459
CANADA.																				
Alberta									40											
Assiniboia [b]																				
British Columbia		3	3	4	5	1	11	5	100	15										
Manitoba	30	27			110	2	291	54	2,013	42	417	4	60	1,303	60		2			1,108

New Brunswick [a]	15	15	8	....	178	3	150	92	2,670	30	500	48	42	890	.....	.....	1	1	25	850
Nova Scotia [a]	22	22	13	1	222	3	206	117	2,917	96	832	171	63	1,445	97	.....	2	....	66	1,633
Ontario	84	69	24	10	200	2	.....	.....	9,990	50	425	4	.....	.....	320	.....	3	....	296	10,305
Prince Edward Island [a]	3	3	3	....	27	1	19	22	719	.....	100	20	13	301	5	.....	1	....	10	176
Saskatchewan [b]	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	20	.....	.....	.....	.....	.....	.....	.....	1	.....
Quebec	[c] 65	15	12	3	55	1	139	49	1,489	20	174	10	33	762	30	.....	1	....	45	1,172
Total	219	154	63	18	797	13	816	339	19,937	254	2,468	257	217	4,701	521	.....	10	1	443	15,244
Newfoundland and Labrador	.....	.....	.....	.....	.....	.....	.....	1	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mexico	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Indies [b]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Central America [b]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	.....	.....	.....	.....	.....	1	.....	1	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand total	3,059	2,083	503	97	14,034	302	18,329	10,429	393,845	2,906	29,256	3,232	10,649	211,832	4,614	3,404	93	54	7,987	219,703

[a] Complete organization; that is, every county organized and holding conventions annually. [b] Not organized. [c] Only 15 of these are English speaking.

STATISTICS FROM COLORED SUNDAY SCHOOLS.

In our present condition of organization it is quite impossible to secure accurate statistics of the colored Sunday schools. They are included in the statistics for the white schools in the preceding tables. We have now fairly good organization in North and South Carolina, likewise in Georgia and Alabama, and a partial organization in Virginia, all under the general direction of our negro field workers.

WHAT OUR STATISTICS SHOW.

1. A very slight gain in the number of Sunday schools and in the total enrollment.
2. Much inaccuracy in the reports, as shown by the fact that no less than 12 States report a gain or loss of about 40,000 each as compared with the last statistics presented, while one State shows a gain of 117,000, and another shows a loss of 237,000. These figures simply mean great inaccuracy somewhere, either with present or former reports.
3. An increase in the number of States organized.
4. That we have held about 14,000 Sunday school conventions during the past year, or probably 40,000 conventions during the triennium.
5. A considerable falling off in the number of primary unions.
6. Nearly 12,000 primary departments reporting separate rooms.
7. A gain of about 25 per cent in the home department.
8. A gain of about 100 per cent in the membership of the teacher training classes.
9. A gain of 120 per cent in the number of teacher training graduates.
10. Nine thousand seven hundred and ninety-three cradle rolls reporting, with 198,223 members.
11. Three thousand five hundred and sixty-four schools observing decision day.
12. Nineteen States and Provinces reporting temperance departments. The Dominion of Canada leads in this department.
13. Eighteen States report 3,337 International Bible Reading Association members.
14. Eighty-nine workers are employed by our associations on full time and 59 on part time.
15. There is a gain of 30 per cent in the number of teachers' meetings.
16. The additions to the churches from the Sunday schools show up better than before, even with many States not reported.

LIST OF EDUCATIONAL PERIODICALS IN THE UNITED STATES ON FILE IN THE BUREAU OF EDUCATION.

Alabama.

Birmingham, Educational Exchange, M., 1905, vol. 20.

Arkansas.

Little Rock, Arkansas School Journal, M., 1905, vol. 10.

California.

San Francisco, Sierra Educational News, M., 1905, vol. 1.
San Francisco, Western Journal of Education, M., 1905, vol. 10.

Colorado.

Denver, Colorado School Journal, M., 1905, vol. 21.
Denver, Rocky Mountain Educator, M., 1905, vol. 12.

Florida.

Gainesville, Florida School Exponent, M., 1905, *vol. 13.*

Illinois.

Bloomington, School and Home Education, M., 1905, vol. 25.
Chicago, Board of Education Bulletin, M., 1905, series 1.
Chicago, Elementary School Teacher, M., 1905, vol. 6.
Chicago, Home Education, M., 1905, vol 2.
Chicago, Kindergarten Magazine, M., 1905, vol. 18.
Chicago, School Review, M., 1905, vol. 13.
Chicago, Teachers' Federation Bulletin, W., 1905, vol. 5.
Oak Park, School Century, M., 1905, vol. 1.
Taylorville, School News and Practical Educator, M., 1905, vol. 19.

Indiana.

Indianapolis, Educator-Journal, M., 1905, vol. 6.

Iowa.

Charles City, Iowa Teacher, M., 1905, vol. 19.
Des Moines, Midland Schools, M., 1905, vol. 20.

Kansas.

Hutchinson, Kansas Educator, M., 1905, vol. 3.
Topeka, Western School Journal, M., 1905, vol. 22.

Kentucky.

Lexington, Southern School Journal, M., 1905, vol. 16.

Louisiana.

New Orleans, Teachers' Outlook, M., 1905, vol. 6.
New Orleans, Louisiana School Review, M., 1905, vol. 13.

Maryland.

Baltimore, Maryland Educational Journal, M., 1905, vol. 1.

Massachusetts.

Boston, American Primary Teacher, M., 1905, vol. 24.
Boston, Education, M., 1905, vol. 26.
Boston, Journal of Education, W., 1905, vol. 62.
Boston, Popular Educator, M., 1905, vol. 23.
Boston, Primary Education, M., 1905, vol. 13.
Springfield, Kindergarten Review, M., 1905, vol. 16.
Worcester, Pedagogical Seminary, Qu., 1905, vol. 12.

Michigan.

Lansing, Moderator Topics, W., 1905, vol. 26.

Minnesota.

Minneapolis, Minnesota School Journal, M., 1905, vol. 5.
Minneapolis, School Education, M., 1905, vol. 24.

Missouri.

Jefferson City, Missouri School Journal, M., 1905, vol. 22.
St. Louis, Evangelish-Lutherisches Schulblatt, M., 1905, vol. 40.

Nebraska.

Lincoln, Nebraska Teacher, M., 1905, vol. 8.

New York.

Albany, American Education from Kindergarten to College, M., 1905, vol. 9.
Dansville, Normal Instructor and Teachers' World, M., 1905, vol. 15.
New York, American School Board Journal, M., 1905, vol. 31.
New York, Educational Foundations, M., 1905, vol. 17.
New York, Educational Review, M., 1905, vol. 30.
New York, New Education, M., 1905, vol. 18.
New York, School, M., 1905, vol. 17.
New York, School Journal, M., 1905, vol. 71.
New York, Teachers' Magazine, M., 1905, vol. 28.
Syracuse, School Bulletin, M., 1905, vol. 32.
Syracuse, Journal of Pedagogy, M., 1905, vol. 18.

Ohio.

Athens, Ohio Teacher, M., 1905, vol. 26.
Cincinnati, Public School Journal, Semimo., 1905, vol. 45.
Cleveland, School Topics, M., 1905, vol. 1.
Columbus, Ohio Educational Monthly, M., 1905, vol. 54.

Oklahoma.

Oklahoma city, School Herald, M., 1905, vol. 13.

Oregon.

Salem, Oregon Teachers' Monthly, M., 1905, vol. 10.

Pennsylvania.

Lancaster, Pennsylvania School Journal, M., 1905, vol. 54.
Philadelphia, The Teacher, M., 1905, vol. 9.

South Dakota.

Madison, Journal of Education, M., 1905, vol. 7.
Mitchell, South Dakota Educator, M., 1905, vol. 10.

Tennessee.

Chattanooga, Southern Educational Review, M., 1905, vol. 2.
Nashville, Progressive Teacher, M., 1905, vol. 11.

Texas.

Dallas, Texas School Journal, M., 1905, vol. 23.
Dallas, Texas School Magazine, M., 1905, vol. 8.

Virginia.

Richmond, Virginia School Journal, M., 1905, vol. 14.

Washington.

Seattle, Northwest Journal of Education, M., 1905, vol. 17.

West Virginia.

Charleston, West Virginia School Journal, M., 1905, vol. 34.

Wisconsin.

Madison, Wisconsin Journal of Education, M., 1905, vol. 37.
Milwaukee, Catholic School Journal, M., 1905, vol. 5.
Milwaukee, Lutherische Schulzeitung, Bimo., 1905, vol. 31.
Milwaukee, Paedagogische Monatshefte, M., 1905, vol. 6.
Milwaukee, Western Teacher (The), M., 1905, vol. 14.

Wyoming.

Sheridan, Wyoming School Journal, M., 1905, vol. 2.

RELIGIOUS EXERCISES IN PUBLIC SCHOOLS.

Statistics relating to religious exercises in the public schools in 1904 of 1,098 cities of more than 4,000 population.

States and Territories	Number of cities reporting.	Religious exercises at the opening of school					Bible read					Other exercises a	
		Conducted.		Prohibited.		Limited to reading of Bible	Yes.	New Testament.	Old Testament.	Book of selections.	Comment forbidden	Prayer by teacher or class.	Hymns or sacred songs.
		Yes.	No.	Yes.	No.								
United States	1,098	830	268	162	936	4	818	800	704	50	530	827	915
North Atlantic Division	440	404	45	26	423	0	402	392	393	28	253	391	409
South Atlantic Division	79	74	5	1	78	0	73	72	70	2	25	75	70
South Central Division	103	63	40	12	91	2	60	60	56	2	44	62	81
North Central Division	401	280	121	74	327	2	275	268	267	17	188	295	338
Western Division	66	9	57	49	17	0	8	8	8	1	50	13	26
North Atlantic Division:													
Maine	25	25	0	0	25	0	25	24	24	2	4	25	20
New Hampshire	15	15	0	0	15	0	15	14	14	1	8	15	13
Vermont	9	8	1	1	8	0	8	8	8	1	1	7	7
Massachusetts	103	103	0	0	103	0	103	103	103	5	94	96	91
Rhode Island	17	16	1	0	17	0	16	15	15	2	2	16	16
Connecticut	40	36	4	2	38	0	36	36	36	3	10	36	34
New York	81	59	22	17	64	0	59	54	54	11	48	55	70
New Jersey	48	46	2	1	47	0	44	42	43	2	46	47	46
Pennsylvania	111	96	15	5	106	0	96	96	96	6	40	94	103
South Atlantic Division:													
Delaware	1	1	0	0	1	0	1	1	1	0	1	1	1
Maryland	7	6	1	0	7	0	6	6	6	0	2	6	6
District of Columbia	1	1	0	0	1	0	1	1	0	0	1	1	1
Virginia	11	10	1	0	11	0	10	10	10	0	7	10	10
West Virginia	11	11	0	0	11	0	11	11	11	1	4	11	11
North Carolina	11	11	0	0	11	0	11	11	11	0	0	11	11
South Carolina	15	15	0	0	15	0	15	15	14	0	3	15	15
Georgia	17	15	2	1	16	0	14	13	13	1	4	16	11
Florida	5	4	1	0	5	0	4	4	4	0	3	4	5
South Central Division:													
Kentucky	18	16	2	1	17	1	16	16	16	0	7	15	16
Tennessee	10	9	1	1	9	0	9	9	9	0	5	9	9
Alabama	15	14	1	0	15	0	14	14	11	0	4	13	13
Mississippi	9	6	3	2	7	0	5	5	5	1	3	6	8
Louisiana	7	1	1	2	5	1	1	1	1	0	5	0	5
Texas	35	11	24	6	29	0	9	9	8	0	17	12	22
Arkansas	7	4	3	0	7	0	4	4	4	1	1	5	6
Oklahoma	1	1	0	0	1	0	1	1	1	0	1	1	1
Indian Territory	1	1	0	0	1	0	1	1	1	0	1	1	1
North Central Division:													
Ohio	79	70	9	2	77	0	70	70	70	4	19	71	73
Indiana	49	44	5	0	49	2	44	43	43	3	15	44	47
Illinois	61	49	12	4	57	0	47	45	45	5	21	51	53
Michigan	51	33	18	11	40	0	32	32	32	0	9	35	44
Wisconsin	35	0	35	35	0	0	0	0	0	0	35	1	16
Minnesota	18	7	11	10	8	0	8	7	7	1	14	7	8
Iowa	36	28	8	2	34	0	27	25	25	3	17	30	34
Missouri	32	19	13	10	22	0	17	17	16	0	14	18	27
North Dakota	2	1	1	0	2	0	1	1	1	0	0	1	2
South Dakota	4	3	1	0	4	0	3	3	3	0	2	3	4
Nebraska	11	6	5	0	11	0	6	6	6	0	1	7	9
Kansas	23	20	3	0	23	0	20	19	19	1	11	18	21
Western Division:													
Montana	5	0	5	5	0	0	0	0	0	0	5	0	2
Wyoming	2	0	2	2	0	0	0	0	0	0	2	1	2
Colorado	10	5	5	4	6	0	4	4	4	0	6	5	7
New Mexico	2	0	2	0	2	0	0	0	0	0	0	0	1
Arizona	2	0	2	2	0	0	0	0	0	0	2	0	0
Utah	5	1	4	4	1	0	1	1	1	0	3	3	3
Nevada													
Idaho	2	0	2	2	0	0	0	0	0	0	2	0	2
Washington	7	0	7	7	0	0	0	0	0	0	6	0	3
Oregon	5	0	5	0	5	0	0	0	0	0	4	0	0
California	25	3	22	22	3	0	3	3	3	1	19	3	6
Alaska													
Hawaii	1	0	1	1	0	0	0	0	0	0	1	1	0

a *Including prayers* chanted and hymns sung as musical exercises.

CORPORAL PUNISHMENT.

Regulations concerning corporal punishment in public schools in cities of 100,000 or more inhabitants.

City.	Regulation.	Authority.
Allegheny, Pa.....	To be avoided when obedience and good order can be preserved by milder measures. Full and accurate record required to be kept, which at all times must be subject to inspection of any member of the board or a parent of a pupil in attendance.	Rules, Art. III, sec. 7, and Art. IV, sec. 3, contained in Annual Report, 1904, pp. 151 and 152.
Atlanta, Ga.....	Restricted to pupils below high school. Only allowed when ordered by principal. The latter is required to keep an accurate record and to report each case to board of education through the superintendent.	Rules (Annual Report, 1903, pp. 82–104), secs. 58, 59.
Baltimore, Md.....	Forbidden.....	Rules, 1901, p. 17, art. 181.
Boston, Mass.....	Forbidden in high schools and kindergartens and as to girls in any school. In any case, restricted to blows upon the hand with a rattan. Each case must be reported through the principal to the superintendent.	Rules and Regulations, 1904, secs. 195 and 218.
Buffalo, N. Y.....	The schools must be governed, as far as possible, without corporal punishment; special permission of the superintendent necessary for any other than a principal or an assistant principal to administer punishment.	Charter and Ordinances, 1896, Chap. XIV, p. 218, sec. 39.
Chicago, Ill.....	Forbidden.....	Rules and Regulations, 1898, p. 38, sec. 62.
Cincinnati, Ohio.....	May not be inflicted for failures in lessons or recitations. Blows on head or violent shaking of pupils prohibited.	Annual Report, 1896, p. 199, sec. 84.
Cleveland, Ohio.....	Forbidden, except in unclassified schools, where it is permitted when principal and superintendent consent.	Handbook, 1904, pp. 92 and 94, secs. 22, 23.
Columbus, Ohio.....	Allowed when all other means have failed To be inflicted in schoolroom by pupil's teacher, the principal being the judge of special cases.	Report, 1891, p. 136, secs. 27, 28.
Denver, Colo.....	Teachers are required to consult with and to get the approval of the principal before administering corporal punishment. The child's parent and the superintendent must be promptly informed by letter.	Rules, 1903, Rule XV, secs. 14 and 16.
Detroit, Mich.....	Must be avoided if possible. Must not be inflicted without full knowledge and consent of principal.	Manual, 1905, p. 109, rules 90 and 92c.
Fall River, Mass	May be inflicted when milder measures fail. Must not ordinarily be administered in presence of school. Record of each punishment and offense must be sent to superintendent for inspection of the board.	Rules and Regulations, 1894, p. 13, sec. 46.
Indianapolis, Ind....	Must be avoided as far as possible. May be inflicted only in presence of principal, and must be immediately reported by him to superintendent.	Manual, 1901, p. 51, sec. 11.
Jersey City, N. J	Forbidden.....	New Jersey School Laws, 1902, p. 46, sec. 106.
Kansas City, Mo	May be inflicted in cases of flagrant offenses, and then only after duly notifying parents or guardians of intended punishment; and if parent or guardian will administer punishment, so as to preserve discipline of the school, teacher must inflict no additional punishment. Must not be inflicted in presence of school, but at the close of session and in presence of two other teachers or the superintendent.	Rules and Regulations, 1896, p. 24, sec. 88.
Los Angeles, Cal.....	Must be avoided if possible; switch or strap to be used; blows upon face or head forbidden.	Report, 1904, p. 174, sec. 87.
Louisville, Ky.....	Forbidden.....	Manual, 1905, p. 33, rule 3.
Memphis, Tenn.....	Must be avoided when good order can be preserved by milder measures.	Manual, 1898, p. 53, sec. 48.
Milwaukee, Wis.	Permitted as last resort by principal only. Excessive punishment and lonely confinement prohibited. Must not be inflicted in presence of class. All cases must be reported monthly to superintendent.	Rules and Regulations, 1901, p. 49, Art. XIV, secs. 7, 8.
Minneapolis, Minn ..	Permitted only when all other means fail. Principal only may inflict corporal punishment; then only when parents give written consent. Each case must be reported by principal to superintendent.	Report, 1904, p. 155, sec. 6.
Newark, N. J.....	Forbidden.....	New Jersey School Laws, 1902, p. 46, sec. 106.

Regulations concerning corporal punishment in public schools in cities of 100,000 or more inhabitants—Continued.

City.	Regulation.	Authority.
New Haven, Conn...	May be administered, with consent of principal, in extreme cases only, but never at same session of school at which the offense was committed. Cases to be reported monthly to superintendent.	Manual, 1891, p. 56, art. 12, sec. 476.
New Orleans, La	Restricted to male pupils below high school, and to be administered only after all other means have failed. Only principal or assistant principal, by authority of the former, have right to inflict. Restricted to the hands and must not be inflicted in presence of class or at time of offense. Monthly report to superintendent required.	Report, 1902, p. 187, Art. VII, secs. 5-8.
New York, N. Y.....	Forbidden.....	By-laws, 1902, p. 41, sec. 451.
Omaha, Nebr.....	Teachers are required to govern their pupils by kindness and appeals to their nobler affections and sentiments.	Rules and Regulations, 1900, p. 55, sec. 105.
Paterson, N. J.....	Forbidden.....	New Jersey School Laws, 1902, p. 46, sec. 106.
Philadelphia, Pa.....	There is no rule, but corporal punishment is said to have been abandoned by common consent.	
Pittsburg, Pa.....	Not forbidden, but is inflicted only in extreme cases.	Report, 1900, p. 11.
Providence, R. I.....	No pupil above primary liable, and in the latter only with written consent of parent or guardian. Each case must be reported to superintendent immediately, who causes an investigation to be made.	By-laws, 1903, p. 26, Art. XIV.
Rochester, N. Y.....	May be inflicted in extreme cases by the principal or, with his consent, by an assistant.	By-laws and Rules, 1898, p. 38, sec. 5.
St. Joseph, Mo.....	Must be avoided as far as possible. Each case to be reported to principal and by him monthly to superintendent.	Report, 1890, p. 170, sec. 13.
St. Louis, Mo.....	Inflicted only with consent of principal, by either teacher or principal, presence of both being required. Authorized but not encouraged by the board, being left largely to the discretion and judgment of principals. In some schools the latter dispense with it altogether, while in others it is permitted in extreme cases.	Report, 1903, p. 231.
St. Paul, Minn.....	Forbidden, except when necessary to repel violence.	Report, 1904, p. 219, sec. 131.
San Francisco, Cal..	May not be inflicted in the high schools or upon girls in any schools. It is permitted only in extreme cases and may be inflicted only by principals or by vice-principals with the consent of principals. Excessive punishment is prohibited, only a strap or a rattan being allowed.	Rules, 1900, p. 25, sec. 64.
Scranton, Pa.....	Forbidden except in flagrant cases of disobedience and disorder. Not to be administered in presence of school, but some other teacher or the superintendent required to be present.	Rules and Regulations, 1887, p. 14, sec. 6.
Syracuse, N. Y.....	Forbidden.....	Rules and Regulations, 1898, p. 30, sec. 20.
Toledo, Ohio.....	Forbidden.....	By-laws, 1885, p. 53, sec. 3.
Washington, D. C...	Must be avoided if possible. All cases must be reported monthly to principal and through him and supervising principal to superintendent.	Rules, 1903, p. 22, sec. 48.
Worcester, Mass.....	Permitted only in extreme cases, then only when approved by principal or superintendent. Must not be inflicted in presence of school. Teachers are required to make and keep complete records of all cases.	Rules, 1905, p. 24, sec. 13.

REQUIREMENTS BY THE SCHOOL BOARDS OF CERTAIN CITIES AS TO VACCINATION OF SCHOOL CHILDREN.

City.	Regulation.	Authority.
Atlanta, Ga.....	No pupil admitted except upon satisfactory evidence of vaccination.	Rules (Annual Report, 1903, pp. 82–104), sec. 84.
Baltimore, Md.....	Vaccination or other protection against smallpox required.	Rules, 1901, Art. XIX, sec. 1.
Boston, Mass.....	Physician's certificate of successful vaccination or certificate showing that the health of child would be endangered by vaccination required. Record must be kept.	Rules (School Doc. No. 6 1904), Chap. XVI, sec. 230.
Cambridge, Mass....	Physician's certificate of successful vaccination or that child is unfit subject for same.	Rules, 1901, Chap. IX, sec. 87.
Chicago, Ill.....	Physician's certificate of vaccination within seven years unless pupil has had varioloid or smallpox.	Rules and Regulations, 1898, p. 30.
Detroit, Mich.....	Certificate of successful vaccination required.....	Manual, 1904 (revised to Jan. 1, 1905), rule 76 (a).
Haverhill, Mass.....	Physician's certificate of successful vaccination or that child is unfit subject for same.	Regulations, 1905, Chap. XI, sec. 1.
Jersey City, N. J....	Successful vaccination required of both pupils and teachers.	Rules and Regulations (revision of January, 1904), Rule LXI.
Louisville, Ky.....	Satisfactory evidence of vaccination or other protection against smallpox required.	Manual, 1905, sec. 2, rule 11.
Newark, N. J.....	Physician's certificate of successful vaccination required unless pupil has had smallpox. Where insusceptibility to virus is claimed or demonstrated the matter is referred to committee for action.	Rules, 1904, Art. V, sec. 1(a).
New Bedford, Mass..	No unvaccinated child admitted to the schools unless physician's certificate shows that he is not a fit subject for vaccination.	Rules and Regulations, 1902, chap. 44, sec. 6.
New Orleans, La....	Physician's certificate of vaccination within seven years required of both pupils and teachers.	Rules, 1905, Art. V, sec. 1, (a) and (b).
Newton, Mass.....	Physician's certificate or other satisfactory evidence of vaccination unless child is unfit for same.	Rules, 1902, Chap. V, sec. 10.
New York, N. Y.....	Physician's certificate of successful vaccination required of teachers, pupils, and janitors. The latter are also required to file semiannually certificates of vaccination of helpers and assistants and members of their families residing in school buildings. Principals must cooperate with agents of the board of health authorized to visit schools for the purpose of vaccinating pupils and teachers.	By-laws (amended to Jan. 27, 1904), sec. 46, Arts. 1 and 2, and sec. 122, art. 2.
Paterson, N. J.....	Successful vaccination may be required by superintendent as a condition of admission (presumably when the danger of an epidemic warrants such a step).	Manual, 1901, page 40.
Philadelphia, Pa	Physician's certificate of successful vaccination, or that pupil has had smallpox, required. Principals required to report number of non-vaccinated pupils applying for admission.	Rules, 1903, Art. XXIII, sec. 1.
Providence, R. I.....	Physician's certificate of vaccination or other evidence of protection against smallpox required.	Rules, 1903, Art. XI, sec. 4.
Reading, Pa.....	Physician's certificate of successful vaccination required.	Manual, 1903, Sec. XIX, rule 2.
St. Louis, Mo.....	No child admitted unless vaccinated and sufficient evidence thereof presented to principal.	Rules, 1902, rule 49, Sec. VI.
San Francisco, Cal ..	Satisfactory evidence of vaccination required....	Rules, 1900, Sec. III.
Springfield, Ohio....	Satisfactory evidence of vaccination must be given when required by board.	Rules and Regulations, 1903, rule 39.
Washington, D. C...	Successful vaccination or other protection against smallpox required.	Rules, 1903, sec. 3.
Worcester, Mass.....	Physician's certificate of vaccination, or that child is an unfit subject for the same, required.	Rules, 1905, Chap. IX, sec. 8.

LENGTH OF SERVICE OF TEACHERS EMPLOYED IN CITIES IN THE UNITED STATES.

The following table gives, for several classes (or groups) of teachers, the percentage of the total number in each class (or group) who have served any given number of years up to forty, on two different bases, namely: (A), including all service, regardless of where performed, and (B), including only service performed in the city where employed at the time of the inquiry regarding it ("in present location").

This inquiry was made by the Bureau in 1904, and the results were published in considerable detail in its Annual Report of that year, chapter 23, pages 1277–1301.

Years.	A.—Total service, regardless of where performed.				B.—Service in present location.			
	Teachers in cities of 8,000 inhabitants and over.			Teachers in cities of 100,000 inhabitants and over.	Teachers in cities of 8,000 inhabitants and over.			Teachers in cities of 100,000 inhabitants and over.
	Males.	Females.	Both sexes.		Males.	Females.	Both sexes.	
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Under 1	1.160	1.887	1.821	2.068	4.286	3.409	3.491	3.265
1	3.200	4.808	4.662	4.389	11.280	9.592	9.750	7.367
2	3.780	5.928	5.733	5.448	10.575	9.588	9.681	8.227
3	4.553	6.356	6.195	5.688	8.647	8.084	8.136	7.409
4	4.424	6.555	6.362	5.848	6.419	7.331	7.246	6.984
5	4.274	6.146	5.977	5.181	5.807	6.400	6.345	5.733
6	4.296	5.765	5.632	5.070	5.195	5.351	5.337	5.358
7	4.081	5.724	5.575	5.367	4.100	5.045	4.957	5.202
8	5.047	5.191	5.178	4.914	3.915	4.516	4.460	4.680
9	3.716	4.611	4.530	4.407	3.895	4.061	4.046	4.372
10	4.489	4.579	4.570	4.100	3.284	3.694	3.656	3.745
11	3.630	3.797	3.782	3.833	3.024	3.235	3.216	3.547
12	3.651	3.977	3.947	3.896	2.690	3.295	3.238	3.361
13	2.985	3.371	3.336	3.397	2.560	2.811	2.790	2.860
14	3.394	3.315	3.322	3.402	2.059	2.681	2.623	2.839
15	3.028	2.919	2.929	2.842	2.356	2.297	2.303	2.426
16	2.427	2.484	2.479	2.455	1.577	1.829	1.805	2.026
17	2.513	2.352	2.366	2.468	1.466	1.766	1.738	1.938
18	2.728	2.058	2.119	2.219	1.577	1.565	1.566	1.643
19	2.706	1.908	1.981	2.090	1.132	1.412	1.386	1.630
20	3.544	2.137	2.265	2.353	1.596	1.519	1.526	1.719
21	2.040	1.598	1.638	1.854	1.243	1.171	1.178	1.394
22	2.062	1.414	1.472	1.610	1.150	1.057	1.066	1.280
23	1.632	1.308	1.246	1.525	.798	.898	.889	1.028
24	1.740	1.099	1.157	1.276	1.002	.766	.788	.939
25	2.160	1.071	1.171	1.210	.946	.738	.757	.885
26	1.761	1.002	1.070	1.468	.575	.751	.735	1.074
27	1.675	.833	.910	1.196	.723	.610	.620	.880
28	1.289	.679	734	.867	.538	.487	.492	.556
29	1.031	.681	.713	.929	.631	.529	.539	.708
30	1.783	.771	.863	.903	.816	.585	.606	.687
31	.902	.587	.615	.747	.538	.466	.473	.636
32	.601	.501	.510	.667	.408	.438	.435	.602
33	.816	.473	.504	.671	.445	.378	.385	.514
34	.666	.420	.442	.618	.408	.342	.348	.489
35	.773	.332	.372	.445	.371	.252	.263	.350
36	.795	.250	.308	.436	.427	.185	.208	.316
37	.515	.225	.251	.382	.241	.172	.178	.270
38	.365	.191	.206	.271	.297	.132	.147	.189
39	.301	.180	.191	.267	.204	.136	.142	.215
40 and over	3.458	.606	.865	1.223	.798	.419	.453	.657

PENSIONS PAID IN GERMANY TO TEACHERS AND THEIR WIDOWS AND ORPHANS.

TABLE I.—*Amount of pensions.*

[From Paedagogische Zeitung, Berlin, April, 1906.]

State.	Pensions to teachers.			Pensions to widows and orphans.		
	Minimum.	Maximum.	Annual increase.	To widows.	Half orphans.	Full orphans.
Prussia	25 per cent of salary	75 per cent of salary	1⅛ per cent	40 per cent of husband's pension; at least $54.	20 per cent of widow's pension for each child.	33⅓ per cent of widow's pension for each child.
Bavaria	$175 for assistant; $180 for teachers; $225 for principal.	$218 for assistant; $348 for teachers; $435 for principal.	$6 after twelve years from graduation from normal school.	$50 from local treasury; $75 from State treasury.	20 per cent of widow's pension, and $25 from State till eighteenth year of life.	40 per cent of widow's pension, and $37.50 from State till eighteenth year of life.
Saxony	30 per cent of salary	80 per cent of salary	From 1 to 3 per cent between fifteenth and fortieth year of service.	20 per cent of husband's salary.	4 per cent of father's salary.	4 per cent of father's salary.
Wurttemberg	40 per cent of salary	92½ per cent of salary up to $600; 85 per cent if salary is higher.	1⅛ per cent if salary is $600 or less; 1½ per cent if salary is higher.	33⅓ per cent of husband's pension.	20 per cent of widow's pension.	25 per cent of widow's pension.
Baden	30 per cent of salary	75 per cent of salary	1½ per cent	30 per cent of husband's salary.	20 per cent of widow's pension.	40 per cent of widow's pension; 30 per cent for every additional child.
Hesse	40 per cent of salary	100 per cent of salary after 50 years of service.	do	$112.50, first to tenth year of teacher's service; $125, eleventh to twentieth year; $137.50, twenty-first to thirtieth year; and $200 from thirty-first year of service.	Children receive 20 per cent of the widow's pension till 18; but both pensions together must not exceed $300.	
Mecklenburg-Schwerin.	25 per cent in most cities; $112.50 in schools maintained by landowners.	90 per cent in most cities; $202.50 from landowners.	Varies between 1 and 4 per cent.	25 per cent of husband's salary.	20 per cent of widow's pension.	40 per cent of widow's pension.
Saxe-Weimar	40 per cent of salary	80 per cent of salary	1 per cent	20 per cent of husband's pension; $76.20 mimimum.	None	Full pension of mother up to 15 years of age.
Mecklenburg-Strelitz.	25 per cent of salary	83⅓ per cent of salary	1⅛ per cent	20 per cent of husband's salary.	4 per cent of father's salary.	10 per cent of father's salary.
Oldenburg	50 per cent of salary	90 per cent of salary	1 per cent	30 per cent of husband's salary; maximum, $428.50.	6 per cent of father's salary; at least $10 per child.	10 per cent of father's salary; at least $16.66 per child.

TABLE I.—*Amount of pensions*—Continued.

State.	Pensions to teachers.			Pensions to widows and orphans.		
	Minimum.	Maximum.	Annual increase.	To widows.	Half orphans.	Full orphans.
Brunswick	33⅓ per cent of salary	80 per cent of salary	1½ per cent, beginning in sixth year.	24 per cent of husband's salary.	None	50 per cent of widow's pension for 1 child; 66⅔ per cent for 2 children; 100 per cent for 3 or more children.
Saxe-Meiningen	40 per cent of salary	75 per cent of salary	1 per cent	20 per cent of husband's salary; at least $77.50.	20 per cent of widow's pension, but together not more than three-fifths of widow's pension.	53⅓ per cent of widow's pension; 1 orphan one-fifth, altogether not more than eight-fifths of widow's pension.
Saxe-Altenburg	25 per cent of salary	80 per cent of salary	1 per cent from first to fourteenth year; 1½ per cent from fifteenth to twenty-fourth year; 2 per cent from twenty-fifth to thirty-ninth year.	25 per cent of husband's salary.	None.	
Saxe-Coburg	40 per cent of salary	100 per cent of salary	1½ per cent	do	30 per cent of widow's pension.	Full pension of mother for 1 or more children.
Saxe-Gotha	do	do	do	do	None.	Full pension of mother.
Anhalt	33⅓ per cent of salary	do	do	25 per cent of husband's salary; minimum, $75; maximum, $206.	do	Full pension of mother up to 18 years of age.
Schwarzburg-Sondershausen	40 per cent of salary	80 per cent of salary	do	20 per cent of husband's salary.	33⅓ per cent of widow's pension for each child.	50 per cent of mother's pension for each child.
Schwarzburg-Rudolstadt	do	do	do	do	None.	Full pension of mother till of age.
Waldeck	50 per cent from tenth to twenty-fifth year of service.	66⅔ per cent after twenty-five years of service.	None	25 per cent of husband's salary.	do	Full pension of mother to each of 3 orphans until fifteen years old.
Reuss (senior line)	40 per cent of salary	80 per cent of salary	1½ per cent, beginning thirty-fifth year of life.	20 per cent of husband's salary.	do	Full pension of mother.
Reuss (junior line)	do	do	1½ per cent	20 per cent of husband's salary; at least $75.	Between $20 and $30 for each child up to 18 years old.	Full pension of mother; at least $75 up to 21 years.
Schaumburg-Lippe	30 per cent of salary	do	1 per cent from 10 to 30 years; 2 per cent from 31 to 45 years.	The State pays $112.50 to every widow of teachers.	None	None.
Lippe	40 per cent of salary, beginning with twelfth year.	do	1½ per cent	17 to 19 per cent of husband's salary.	do	$15 for each child.

Lübeck	33⅓ per cent of salary	75 per cent of salary	1⅓ per cent	40 per cent of husband's pension; maximum, $500.	20 per cent of widow's pension for each child.	33⅓ per cent of widow's pension for each child.
Bremen	40 per cent of salary	80 per cent of salary	2 per cent	Between 16 and 32 per cent of husband's salary.	None	50 per cent of widow's pension; 2 or more children full mother's pension.
Hamburg	40 per cent of salary up to 10 years of service.	100 per cent of salary	1½ per cent	20 to 25 per cent of husband's salary.	5 per cent of father's salary.	10 per cent of father's salary for each child; if only 1 child, 15 per cent.
Alsace-Lorraine	25 per cent of salary	75 per cent of salary	1⅔ per cent	40 per cent of husband's pension.	20 per cent of mother's pension for each child.	33⅓ per cent of mother's pension for each child.

TABLE II.—*Terms according to which pensions are computed.*

State.	Pensions to teachers.				After what year of husband's service may widow claim pension?
	Number of years after which pensions are authorized.	Is provision made for earlier payment of pension, or by act of grace?	May pension be claimed without proof of disability? At what year of service?	In what year does time of service begin?	
Prussia	10 years after first appointment.	In case of disability at any time.	At completed sixty-fifth year of age.	From day of first appointment.	After the tenth year of husband' service.
Bavaria	From first day of appointment.	.....	Proof of disability always required, but is mere form at high age.	October 1 after graduation from normal school.	From first day of husband's service.
Saxony	10 years after definite appointment.	Extra provision by act of grace.	No	From day of last examination; at least from twenty-five years of life.	From first year of husband's service.
Wurttemberg	10 years after 25 years of age.	.....do.....	No; but school authorities can require it after his sixty-fifth year of age.	From twenty-fifth year of age.	At husband's definite appointment.
Baden	10 years after first appointment.	If disability is caused by service.	No	From day of first appointment.	After the tenth year of husband's service; if he dies earlier she is entitled to 30 per cent of minimum pension.
Hesse	From day of definite appointment.	After 5 years of service in one place.	At 70 years of age	From day of last State examination.	From first year of husband's service.
Mecklenburg-Schwerin	In cities, after 10 years; in rural districts, after 20 years.	Extra provision by act of grace.	No	From day of first appointment.	At husband's definite appointment.
Oldenburg	5 years after definite appointment.	.....	At 70 years of age, or after 50 years of service.	.....do.....	After the fourth year of husband's service.
Saxe-Weimar	From day of definite appointment.	.....	Law is silent on this point	From July 1 of year in which last examination passed.	From first year of husband's service.
Mecklenburg-Strelitz	10 years after definite appointment.	Yes; if disability is caused by service.	No	From day of definite appointment.	Do.
Brunswick	From day of definite appointment.	.....	At 70 years of age	.....do.....	From day of definite appointment.
Saxe-Meiningen	10 years after definite appointment.	Extra provision by act of grace.	At 65 years of age	.....do.....	Do.
Saxe-Coburg	From day of definite appointment.	No	After 40 years of service, at 65 years of age.	.....do.....	Do.
Saxe-Gotha	From day of provisional appointment.	.....	At 65 years of age	From day of last State examination.	One year after wedding.
Anhalt	From day of definite appointment.	.....	After 50 years of service, at 70 years of age.	From first day of service	From day of definite appointment.
Schwarzburg-Sondershausen.	After the first year of service.	.....	After 40 years of service	From twenty-first year of age.	After the first year of husband's service.

Schwarzburg-Rudolstadt	From day of definite appointment.		At 65 years of age	From day of definite appointment.	From day of definite appointment.
Waldeck	do	At once, at appointment, 33⅓ per cent of salary	Law is silent on this point	From day of first or provisional appointment.	Do.
Reuss (senior line)	do	No	At 65 years of age	From twenty-fifth year of age.	From day of wedding.
Reuss (junior line)	do	Special provision by act of grace.	At 70 years of age	From twenty-first year of life.	Every widow has claim upon pension.
Schaumburg-Lippe	After 10 years of service	No legal provision	do	From day of first appointment.	From day of appointment.
Lippe	After 4 years of service	No	After 45 years of service, or at 65 years of age.	do	After the fourth year of husband's service.
Lübeck	10 years after first appointment.	If disabled in service, 33⅓ per cent of salary; if disabled otherwise an act of grace is necessary.	No	From day of definite appointment.	After the tenth year of husband's service.
Bremen	10 years after definite appointment.	By act of grace up to 40 per cent of salary.	Yes	do	Do.
Hamburg	do	By act of grace	No	From day of definite appointment; at latest from twenty-fifth year of life.	From day of definite appointment, minimum $125.
Alsace-Lorraine	do	If disability occurs	At 65 years of age	From day of first appointment.	After the tenth year of husband's service.

TABLE III.—*Comparative summary of pensions paid.*

[Percentage of salaries.]

Years of service.	Frusia.	Saxony.	Wurtemberg.	Baden.	Hesse.	Saxe Weimar.	Oldenburg.	Brunswick.	Saxe-Meiningen.	Saxe-Altenburg	Saxe-Coburg-Gotha.	Anhalt.	Schwarzburg-Sondershausen.	Schwarzburg-Rudolstadt.	Waldeck.	Reuss (senior line).	Reuss (junior line).	Schaumburg Lippe.	Lippe.	Lübeck.	Bremen.	Hamburg.	Alsace-Lorraine.
1					40	40	50	33.33		25	40	33	40		33		40		40			40	
2					40	41	50	33.33		25	40	33	40	40	33		40		40			41.5	
3					40	42	50	33.33		26	40	33	40	41.5	33		40		40			43	
4					40	43	50	33.33		26	40	33	40	43	33		40		40			44.5	
5					40	44	50	33.33		27	40	33	40	44.5	33		40		40			46	
6					40	45	50	33.33		28	40	33	40	46	33		40		40			47.5	
7					40	46	50	33.33		29	40	33	40	47.5	33		40		40			49	
8					40	47	50	33.33		30	40	33	40	49	33		40		40			50.5	
9					40	48	50	33.33		31	40	33	40	50.5	33		40		40			52	
10					40	49	50	33.33		32	40	33	40	52	33		40		40			53.5	
11					40	50	50	33.33		33	40	33	40	53.5	33		40		40			55	
12					40	51	50	33.33		34	40	33	40	55	33		40		40			56.5	
13					40	52	50	33.33		35	40	33	40	56.5	33		40		40			58	
14					40	53	50	33.33		36	40	33	40	58	33		40		40			59.5	
15					40	54	50	33.33		37	40	33	40	59.5	33		40		40			61	
16					40	55	50	33.33		38	40	33	40	61	33		40		40			62.5	
17					40	56	50	33.33		39	40	33	40	62.5	33		40		40			64	
18					40	57	50	33.33		40	40	33	40	64	33		40		40			65.5	
19					40	58	50	33.33		41	40	33	40	65.5	33		40		40			67	
20					40	59	50	33.33		42	40	33	40	67	33		40		40			68.5	
21					40	60	50	33.33		43	40	33	40	68.5	33		40		40			70	
22					40	61	50	33.33		44	40	33	40	70	33		40		40			71.5	
23					40	62	50	33.33		45	40	33	40	71.5	33		40		40			73	
24					40	63	50	33.33		46	40	33	40	73	33		40		40			74.5	
25					40	64	50	33.33		47	40	33	40	74.5	33		40		40			76	
26					40	65	50	33.33		48	40	33	40	76	33		40		40			77.5	
27					40	66	50	33.33		49	40	33	40	77.5	33		40		40			79	
28					40	67	50	33.33		50	40	33	40	79	33		40		40			80.5	
29					40	68	50	33.33		51	40	33	40	80.5	33		40		40			82	
30					40	69	50	33.33		52	40	33	40	82	33		40		40			83.5	
31					40	70	50	33.33		53	40	33	40	83.5	33		40		40			85	
32					40	71	50	33.33		54	40	33	40	85	33		40		40			86.5	
33					40	72	50	33.33		55	40	33	40	86.5	33		40		40			88	
34					40	73	50	33.33		56	40	33	40	88	33		40		40			89.5	
35					40	74	50	33.33		57	40	33	40	89.5	33		40		40			91	
36					40	75	50	33.33		58	40	33	40	91	33		40		40			92.5	
37					40	76	50	33.33		59	40	33	40	92.5	33		40		40			94	
38					40	77	50	33.33		60	40	33	40	94	33		40		40			95.5	
39					40	78	50	33.33		61	40	33	40	95.5	33		40		40			97	
40					40	79	50	33.33		62	40	33	40	97	33		40		40			98.5	
41					40	80	50	33.33		63	40	33	40	98.5	33		40		40			100	
42					40	81	50	33.33		64	40	33	40	100	33		40		40			101.5	
43					40	82	50	33.33		65	40	33	40	101.5	33		40		40			103	
44					40	83	50	33.33		66	40	33	40	103	33		40		40			104.5	
45					40	84	50	33.33		67	40	33	40	104.5	33		40		40			106	
46					40	85	50	33.33		68	40	33	40	106	33		40		40			107.5	
47					40	86	50	33.33		69	40	33	40	107.5	33		40		40			109	
48					40	87	50	33.33		70	40	33	40	109	33		40		40			110.5	
49					40	88	50	33.33		71	40	33	40	110.5	33		40		40			112	
50					40	89	50	33.33		72	40	33	40	112	33		40		40			113.5	
51					40	90	50	33.33		73	40	33	40	113.5	33		40		40			115	
52					40	91	50	33.33		74	40	33	40	115	33		40		40			116.5	
53					40	92	50	33.33		75	40	33	40	116.5	33		40		40			118	
54					40	93	50	33.33		76	40	33	40	118	33		40		40			119.5	
55					40	94	50	33.33		77	40	33	40	119.5	33		40		40			121	
56					40	95	50	33.33		78	40	33	40	121	33		40		40			122.5	

HIGHER COMMERCIAL EDUCATION IN EUROPE.

In Europe the importance of higher commercial education has been recognized by the establishment of commercial academies or university faculties of commerce in Leipzig, Frankfort-on-the-Main, Cologne, and Aix-la-Chapelle (Aachen), Germany; in Vienna, Trieste, and Prague, Austria; in Zurich, Switzerland; in Paris and Lyon, France; in Antwerp, Belgium; in London and Birmingham, England, and in Edinburgh, Scotland. The four institutions in Germany already, five years after their establishment, have nearly 3,000 students, 358 of whom are foreigners, chiefly from countries where no provision is made for higher commercial studies. These institutions have no uniform curriculum, such as universities or polytechnica have, nor is their organization the same. Two of the four institutions (Frankfort and Cologne) are independent schools, maintained by means of tuition fees, city subsidies, and endowments; one is connected with the University of Leipzig, one with the Polytechnicum at Aix-la-Chapelle. The Leipzig institution is the oldest of the four and has the greatest number of matriculated students; that of Cologne has the largest number of hearers (or nonmatriculated students), most of whom attend evening courses. The institution at Frankfort is modeled somewhat after the French social science schools and bears the title "Academy of Social and Commercial Sciences." The other three have purely commercial curricula, in which the subject of "merchandise," or commercial technology, takes up much time. All of them teach from four to six modern languages, two or three of which are optional studies. A fifth institution, intended to aid the higher education of merchants, is planned for Hamburg, where the officials of the great steamship companies and the heads of exporting houses are agitating the establishment of a commercial university. In Berlin the Chamber of Commerce will open a new institution for higher commercial studies in October, 1906. The course of study for the year 1906–7 is designed to include 72 series of lectures by 35 professors. The subjects are: Commercial science, political economy, commercial law, pure and applied natural science, geography, counting-house theory and practice, study of merchandise, technology, insurance, and others. A seminary for foreign languages will be connected with this new school, where in addition to Russian, Spanish, Italian, English, and French, other languages, such as Danish, Swedish, Portuguese, Japanese, Chinese, Arabic, and Suaheli will be taught as special or optional studies. The institution is to be governed by a faculty—that is, it is to have a collegiate organization, with a rector at its head. Professor Jastrow has been chosen for the first rectorial period of three years. Though this university will not grant academic degrees, its graduates will be admitted to State examinations, the passing of which entitles them to high positions in the State's service. The institution will be opened in its own home erected for the purpose. It is independent of the old established university. There seems to be prevalent among the founders and supporters of higher commercial institutions in continental Europe a dislike to submit the professional education of merchants to the old established rules and methods of universities.

SALARIES OF SCHOOL TEACHERS AND OFFICIALS.

Salaries of school officers and teachers in cities of 25,000 inhabitants and upward, 1905.[a]

I.—SALARIES OF OFFICERS AND SUPERVISORS AND TEACHERS OF SPECIAL SUBJECTS.

	City.	Population (Census Office estimate, 1905).	Rank in population.	Superintendent of schools.	Assistant superintendents and general supervisors.		Drawing.			Music.			Physical training.			Supervisor of writing.	Supervisor of German.	Supervisor of manual training.	Supervisor of sewing.	Supervisor of kindergartens.	Supervisor of cooking.
					Number.	Salaries.	Supervisor.	Number of assistants.	Salaries of assistants.	Supervisor.	Number of assistants.	Salaries of assistants.	Supervisor.	Number of assistants.	Salaries of assistants.						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Akron, Ohio	49,403	90	$3,100			$1,000			$1,600											
2	Albany, N. Y.[b]	97,801	43	3,000			1,900			1,900										$900	
3	Allegheny, Pa.[b]	142,848	27	3,000			1,200	1	$900	1,000			$1,000	1	$650			$2,100			$850
4	Allentown, Pa.	40,371	118	1,750			500			700											
5	Altoona, Pa.	45,557	96	2,000			540			675			540					1,350			
6	Atlanta, Ga.	102,702	40	2,500	1	$1,800	[c] 1,500			1,200			1,200			(c)		(c)	$525		
7	Atlantic City, N. J.	37,593	127	2,100			750			750								1,000			
8	Auburn, N. Y.	32,528	143	2,750			900			850								1,100			900
9	Augusta, Ga.	42,511	102	2,500						(d)											
10	Aurora, Ill. (East side) Aurora, Ill. (West side)	26,377	169	2,400 2,200			900 1,100			[e] 580 [f] 300								1,400	300		
11	Baltimore, Md.[g]	546,217	6	5,000	1 1	2,500 2,400	1,200	10	[h] 642	1,500	3	[h] $900	1,500	1	900			[i] 600	900		
12	Bay City, Mich.[j]	[k] 40,614	112	[l] 2,800			800			725									525		600
13	Bayonne, N. J.[b]	42,262	103	2,500			750											[m] 850			
14	Binghamton, N. Y.	43,100	101	2,500			(d)			(d)											
15	Birmingham, Ala.	44,640	98	2,100			1,200											900			
16	Bloomington, Ill.	25,219	184	3,000	[n] 1	(d)	600			750			450					1,100			(d)

[a] The data are taken in the main from the Report on Teachers' Salaries, etc., made by a committee of the National Educational Association, of which Hon. Carroll D. Wright was chairman. Where other sources are used notes indicate the fact. Unless otherwise stated, data are for 1904.

[b] From Annual Report for 1905.

[c] Drawing supervisor is also supervisor of writing and of manual training.

[d] No datum as to salary.

[e] For 3½ days per week.

[f] For 2 days per week.

[g] From Maryland Educational Journal, June 15, 1906.

[h] Average.

[i] One-third time.

[j] From salary schedule for 1905.

[k] Including West Bay City, annexed April, 1905.

[l] For 1907.

[m] Maximum paid special teachers.

[n] Supervisor of primary grades.

Salaries of school officers and teachers in cities of 25,000 inhabitants and upward, 1905—Continued.

1.—SALARIES OF OFFICERS AND SUPERVISORS AND TEACHERS OF SPECIAL SUBJECTS—Continued.

	City.	Population (Census Office estimate, 1905).	Rank in population.	Superintendent of schools	Assistant superintendents and general supervisors		Drawing.			Music.			Physical training.			Supervisor of writing.	Supervisor of German.	Supervisor of manual training.	Supervisor of sewing.	Supervisor of kindergartens.	Supervisor of cooking
					Number.	Salaries.	Supervisor	Number of assistants.	Salaries of assistants.	Supervisor.	Number of assistants.	Salaries of assistants.	Supervisor.	Number of assistants.	Salaries of assistants.						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
17	Boston, Mass.[a]	595,380	5	$6,000	6	$3,780	$3,600	1 1 4 4	$2,508 2,500 1,500 1,200	$3,000	1 3 3 1	$2,652 2,292 1,140 1,044	$3,000	1 1 5 6 b 1 b 4 1	$2,280 1,800 1,200 936 900 750	.....	.....	$2,508	$936	$2,280	$1,500
18	Bridgeport, Conn.	82,061	54	3,900	....	.....	1,200	..	...	(c)	.	.. . .	1 400	.	... ..	.....	.....	.....	.....	.....	.....
19	Brocton, Mass	47,794	91	2,800	1	(c)	700			(c)											
20	Buffalo, N. Y.[d]	376,945	8	5,000	e 2	2,000	1,600	3	750	1,600	1 1 2	1,550 1,200 600	1 000	1 1	825 775	$1,800	.....	2,000	1,000	1,000	.. ...
21	Burlington, Iowa	25,318	151	f2,000	....	.....	g 700	. ..		1,000	...	.... ..	....	.	.....	(g)	.....	.....	.....	.....	.....
22	Butte, Mont.	41,757	103	3,000	....	...	1,050	..	.....	1,050						.....			.....	.....	.....
23	Cambridge, Mass.[h]	97,434	45	3,500	f 1	1,300	2,000	1	800	2,000	1	850	950	1	850	.....	.....	.....	700	.....	.... ..
24	Camden, N. J.[h]	83,363	53	3,500	...	.	1,300	.	.. ..	1,300	.	.... ..	1,000	....	... ..	. ....	.....	1,200	.. . .	.....	.....
25	Canton, Ohio	37,907	122	2 700	...	.. .	950	....	.. ...	....	..	... .	713	.	....	.....	....	.....	.. ..	.....	.. ...
26	Cedar Rapids, Iowa	28,750	160	3,000	...	...	900	.	... ..	..	....		....	.	.....	.. ...	.....	.....	810	.....	... ..
27	Charleston, S. C.	56,232	61	2,500	..	.....	...	.	....	.	.	.. ..			.....	.. ...	.....	.....	. .	. ..	.. ...
28	Chattanooga, Tenn.	34,170	133	2,000	...	....	540	...	.. ..	.. ...	.	. ..	540		. ....	.....	.. . .	.....	..	.....	.....
29	Chelsea, Mass.	37,289	129	2 800	...	....	850	1	(c)	(c)	..	..	....		. ....	.....	.. ...	.....	(c)	.. ..	. ...
30	Chester, Pa.[d]	37,333	128	2,200	....	.....	.... .	...	... .	570	....	. ...	...	.....	800	618	.....	... ..	.. ...	... ..	.. ...
31	Chicago, Ill.	1,990,750	2	10,000	6 1 1	4,000 2,500 2,000	2,400	4	1,400		4	1,400	3 000	21	to 1,300	.....	....	3,000	.	. ...	1,125
32	Cincinnati, Ohio[h]	343,337	11	5,000	2	2,500	2 000	7	850	2,100	9	1 000	2,000	2 3	950 850	2,000	$2,100	2,000	.	.....	1,200

33	Cleveland, Ohio[f]	437,114	7	5,000	1	3,000	2,200	...	...	1,600	1	1,200	3,000	[k]1	1,300	2,200	.....	2,500	.....	1,400	.....
					1	2,750								[k]3	1,200						
					2	2,500								[f]2	1,100						
					1	2,200								1	1,050						
					1	1,800								[k]3	1,000						
					1	1,600								[k]1	900						
														[k]1	850						
														[k]1	800						
34	Colorado Springs, Colo.	28,186	161	(c)	...	.....	1,200	...	.....	(c)	...	.....	.....	...	.....	.....	.....	900	.....	.....	.....
35	Columbus, Ohio	142,105	28	4,000	...	.....	1,500	...	.....	1,500	...	.....	1,250	...	.....	.....	.....	.....	.....	.....	.....
36	Council Bluffs, Iowa	25,231	183	2,400	...	.....	(c g)	...	.....	(c)	...	.....	.....	...	.....	(g)	.....	.....	.....	.....	.....
37	Covington, Ky	45,577	95	2,400	...	.....	700	...	.....	1,250	...	.....	.....	...	.....	1,000	.....	1,200	700	500	.....
38	Dallas, Tex	52,248	84	[f]2,700	...	.....	900	...	.....	.....	...	.....	.....	...	.....	.....	.....	1,215	.....	.....	800
39	Davenport, Iowa	39,797	114	2,400	...	.....	1,000	...	.....	750	...	.....	1,100	1	450	.....	m 600	1,000	.....	.....	900
40	Dayton, Ohio [f]	96,380	42	4,000	...	.....	1,282	...	.....	1,282	...	.....	n1,282	...	.....	1,282	1,045	1,425	1,092	960	950
41	Denver, Colo.[o]	150,317	26	5,000	1	4,000	2,000	1	1,500	1,780	...	.....	1,750	2	760	.....	760	1,500	1,200	1,100	635
					1	3,000															
42	Des Moines, Iowa (West side)	75,626	87	3,000	...	.....	(c)	...	.....	(c)	...	.....	.....	...	.....	.....	.....	(c)	.....	(c)	.....
43	Detroit, Mich.[o]	325,563	12	4,000	[r]1	2,500	1,000	...	.....	1,500	...	.....	1,500	...	.....	1,500	.....	1,700	700	1,300	700
44	Dubuque, Iowa	41,941	107	2,500	...	.....	.....	...	.....	.....	...	.....	750	...	.....	.....	.....	.....	.....	700	.....
45	Duluth Minn	64,942	67	3,600	...	.....	1,060	...	.....	.....	...	.....	900	...	.....	675	.....	.....	.....	.....	.....
46	Easton, Pa	27,808	163	2,000	...	.....	.....	...	.....	.....	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....
47	East Orange, N. J	23,175	185	3,900	...	.....	1,200	...	.....	1,000	...	.....	900	...	.....	.....	.....	900	750	.....	.....
48	East St. Louis, Ill	29,385	116	2,500	...	.....	1,200	...	.....	(f)	...	.....	(c)	...	.....	.....	.....	.....	.....	.....	.....
49	Elizabeth, N. J	60,509	73	2,700	...	.....	1,000	...	.....	.....	...	.....	800	...	.....	.....	.....	.....	.....	.....	.....
50	Elmira, N. Y	35,729	132	2,500	...	.....	900	...	.....	(c)	...	.....	650	...	.....	.....	.....	.....	.....	.....	.....
51	Erie, Pa [p]	52,733	70	3,000	...	.....	703	1	456	731	1	513	.....	...	.....	.....	q1,200	1,216	.....	380	665
52	Evansville, Ind	63,132	70	3,000	...	.....	1,200	...	.....	1,200	...	.....	1,200	...	.....	.....	(c)	.....	.....	1,400	.....
53	Everett, Mass.[p]	29,111	156	2,500	...	.....	800	...	.....	1,400	...	.....	.....	...	.....	.....	.....	800	450	.....	.....
54	Fall River, Mass	105,702	38	3,300	...	.....	1,000	...	.....	1,200	...	.....	.....	...	.....	.....	.....	.....	(c)	.....	900
55	Fitchburg, Mass. [p]	33,021	141	2,700	.	.....	r1,500	2	1,200	s600	...	.....	.....	...	.....	.....	.....	(r)	.....	.....	500
								1	775												
56	Fort Wayne, Ind	49,975	88	3,000	...	.....	1,100	...	.....	1,100	...	.....	1,000	...	.....	.....	.....	.....	.....	.....	.....
57	Fort Worth, Tex	27,028	167	2,000	...	.....	1,188	...	.....	950	1	475	.....	...	.....	.....	.....	.....	.....	.....	.....
58	Galveston Tex	38,484	140	[f]3,500	...	.....	.....	...	.....	.....	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....
59	Gloucester, Mass	26,011	175	2,300	...	.....	800	1	200	1,200	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....
60	Grand Rapids Mich. [p]	97,756	44	3,500	1	1,600	1,300	...	.....	1,000	...	.....	.....	...	.....	.....	.....	1,500	.....	900	.....
61	Hamilton, Ohio	27,044	166	2,500	...	.....	760	...	.....	1,140	...	.....	.....	...	.....	.....	.....	.....	.....	.....	.....
62	Harrisburg, Pa.[o]	64,807	82	2,500	...	.....	950	1	950	800	...	.....	1,045	...	.....	.....	.....	.....	.....	.....	.....
								1	700												

a From School Document No. 1, 1906.
b Teachers of vocal music, physical training and reading.
c No datum as to salary
d From salary schedule for 1905.
e Supervisors of primary and of grammar grades.
f For 1907
g Supervisor of drawing is also supervisor of writing.
h From Annual Report for 1905.
i Supervisor of primary grades.
j Salary schedule for 1907
k Special teachers in high schools.
l Includes 1 special teacher in high schools.
m Half time.
n Also of elocution
o Salary schedule for 1905.
p Salary schedule for 1906.
q Also teacher in high school.
r Supervisor of drawing is also supervisor of manual training.
s Singing, 4 days per week.

Salaries of school officers and teachers in cities of 25,000 inhabitants and upward, 1905—Continued.

I.—SALARIES OF OFFICERS AND SUPERVISORS AND TEACHERS OF SPECIAL SUBJECTS—Continued.

	City.	Population (Census Office estimate, 1905).	Rank in population.	Superintendent of schools.	Assistant superintendents and general supervisors.		Drawing.			Music.			Physical training.			Supervisor of writing.	Supervisor of German.	Supervisor of manual training.	Supervisor of sewing.	Supervisor of kindergartens.	Supervisor of cooking.
					Number.	Salaries.	Supervisor.	Number of assistants.	Salaries of assistants.	Supervisor.	Number of assistants.	Salaries of assistants.	Supervisor.	Number of assistants.	Salaries of assistants.						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
63	Hartford, Conn.	93,160	47	$1,500			(a)			(a)							(a)	(a)	(a)	(a)	(a)
64	Haverhill, Mass. [b]	37,830	124	2,300			$650	1	$500	$950								$823	$700		$800
65	Hoboken, N. J.	65,498	65	2,800			900	2	720												
66	Holyoke, Mass. [b]	46,934	80	3,000			1,200	1	800	1,100							$1,000				
67	Houston, Tex. [c]	56,300	80	[d] 3,000			[e] 900			720						(a)	720				
68	Indianapolis, Ind.	212,198	20	5,000	2	$2,500	2,300	1	1,500	2,500			$1,800			(a)	(a)	(a)			
69	Jackson, Mich.	25,330	180	2,500			800			800											
70	Jacksonville, Fla.	35,301	135	1,500																	
71	Jamestown, N. Y.	26,005	178	2,500			900			750			1,050	1	$450			1,000			500
														1	350						
72	Jersey City, N. J. [c]	232,600	18	4,500	[f] 1	1,900	2,400														
					[g] 1	1,300															
73	Johnstown, Pa.	42,160	105	2,500	1	(a)	1,050			1,000											
74	Joliet, Ill.	31,713	146	2,300	1	1,050	700			1,000											
75	Joplin, Mo.	34,063	139	1,500	1	(a)															
76	Kalamazoo, Mich.	31,127	148	2,200						775										$625	
77	Kansas City, Kans.	67,614	63	2,250						810											
78	Kansas City, Mo. [b]	179,272	24	4,000	7	2,400	1,300			1,300			1,300						1,300	900	1,300
79	Kingston, N. Y. [c]	25,411	179	2,800			700	1	550	700						$1,000					
80	Knoxville, Tenn.	35,492	133																		
81	La Crosse, Wis.	29,078	158	2,300			725			750							625				
82	Lancaster, Pa.	46,184	94	2,000						650	2	$500									
83	Lawrence, Mass.	70,050	61	3,000			1,500	1	700	800	1	650				1,200			500		
84	Lexington, Ky. [c]	26,769	159	2,000	1	1,200	500			900											
85	Lima, Ohio	27,048	165	2,400						570											
86	Lincoln, Nebr.	46,874	93	2,400			800			800											
87	Little Rock, Ark.	38,716	117	2,100																	
88	Los Angeles, Cal. [b]	121,067	31	4,250	2	2,750	1,500	1	1,400	1,500	1	1,400								1,800	1,500
89	Louisville, Ky.	222,000	19	4,200			1,500			1,200											
90	Lowell, Mass. [b]	94,880	40	3,000			750	1	750	1,250	1	700							800	500	

91	Lynn, Mass	77,042	55	2,500				1,250				1,800			(a)											600
92	McKeesport, Pa	42,024	106	2,100								1,000			900			(a)								
93	Macon, Ga. b	32,618	142	2,250								621									1,200					720
94	Malden, Mass	38,037	121	2,500				1,500				1,700						(a)								
95	Manchester, N. H	63,417	69	2,300				1,200				1,200														
96	Memphis, Tenn	131,235	30	2,400			1,800					900														
97	Meriden, Conn	25,616	178	2,000				700				1,200														
98	Milwaukee, Wis. c	312,948	13	6,000	1	2,500						1,500			1,000											700
					1	2,400																				
					1	2,000																				
99	Minneapolis, Minn	261,974	17	4,260	2	2,200	2,000	1	900	1,300				1,000				(a)	(a)							900
100	Mobile, Ala	42,164	104	2,500	1	1,200																				
101	Montgomery, Ala	30,789	115	2,000			e 1,080			720				450			(c)									
102	Muncie, Ind	26,301	171	2,300						1,080																
103	Nashua, N. H	26,193	173	2,000			900			1,100																
104	Nashville, Tenn	64,227	50	3,000			1,500			1,400											1,300					1,000
105	Newark, N. J. b	283,289	16	4,500		2,500	h 1,800	1	h 1,200	h 1,800	1	h 1,200	h 2,000			h 2,000		h 2,500	h 1,300							
					1	1,800																				
106	New Bedford, Mass. b	74,362	58	3,800			1,500			1,900											1,600	700				700
107	New Britain, Conn	30,178	153	2,800			750			1,250				750				1,400			(a)					750
108	Newburgh, N. Y	26,320	170	2,000			850			900											1,300	600				
109	Newcastle, Pa	35,429	134	1,800			630			810								675								
110	New Haven, Conn	119,027	33	3,800	1	2,100	1,700			2,300								1,500			2,000	750	1,000			600
111	New Orleans, La	309,639	14	2,500	2	1,500	850	6	540 to 765	750	5	585 to 675														
112	Newport, Ky. f	29,991	154	1,710			e 750	1	540	900								(c)								
113	Newport, R. I. c	25,039	157	3,000			1,000	1	900	1,000				850												
								1	300																	
114	Newport News, Va	27,230	164	1,500			540														360					
115	Newton, Mass	36,827	130	3,500			2,000			1,800				1,000				(a)			(a)	625	(a)			
116	New York, N. Y	4,000,925	1	d 10,000	8	46,500	4,000	24	900 to 2,160	4,000	52	1,000 to 2,160	4,000	12	900 to 1,400						4,000	2,500	2,533			2,500
					26	5,000																				
117	Niagara Falls, N. Y. c	26,431	168	2,200			900			750								1,050				500				750
118	Norfolk, Va	58,006	79	2,050			750			900																
119	Oakland, Cal	72,670	60	3,300		2,000	1,500			1,200				1,200	2	h 756	1,500				1,500	1,100				1,100
120	Omaha, Nebr	120,565	32	3,600	1	1,235				1,235				(a)												
121	Orange, N. J	26,101	174	3,000						1,300				(a)							1,000	(a)				(a)
122	Oshkosh, Wis	30,575	151	2,100			750			600								(a)				450				
123	Passaic, N. J	37,837	123	3,000			850			900				750								700				850
124	Paterson, N. J	11,529	37	3,600			1,100			1,500											(a)					
125	Pawtucket, R. I	43,351	99	2,600			1,400	1	700	1,200																
126	Peoria, Ill	65,026	60	3,500			1,500			1,500																900

a No datum as to salary.
b Salary schedule for 1906.
c Salary schedule for 1905.
d For 1907.
e Supervisor of drawing is also supervisor of writing.
f Supervisor of primary grades
g Supervisor of grammar grades.
h Maximum.
i Also bookkeeping.
j Salary schedule for 1901.
k Half time.

Salaries of school officers and teachers in cities of 25,000 inhabitants and upward, 1905—Continued.

I.—SALARIES OF OFFICERS AND SUPERVISORS AND TEACHERS OF SPECIAL SUBJECTS—Continued.

	City.	Population (Census Office estimate, 1905).	Rank in population.	Superintendent of schools.	Assistant superintendents and general supervisors		Drawing			Music.			Physical training.			Supervisor of writing.	Supervisor of German.	Supervisor of manual training.	Supervisor of sewing.	Supervisor of kindergartens.	Supervisor of cooking.
					Number.	Salaries.	Supervisor.	Number of assistants.	Salaries of assistants.	Supervisor.	Number of assistants.	Salaries of assistants.	Supervisor.	Number of assistants.	Salaries of assistants.						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
127	Perth Amboy, N. J.	25,895	177	$2,500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
128	Philadelphia, Pa.	1,417,062	3	[a] 7,500	6	$3,000	$3,000	8	$1,000	$3,000	16	$1,000	..	..	..	..	..	..	$770	$1,800	$770
129	Pittsburg, Pa.	364,161	10	5,000	[b] 1	(c)	1,500	..	..	1,500	..	..	..	..	..	..	..	..	..	..	900
130	Pittsfield, Mass.	25,001	188	2,300	..	..	1,000	..	..	1,000	..	..	..	..	..	..	..	[d] $300	..	..	..
131	Portland, Me. [e]	54,330	83	(c)	..	..	[f] 1,400	1	1,000	800	1	700	..	..	..	[f]	..	1,500	..	..	800
132	Portland, Oreg. [e]	104,141	39	4,000	..	..	1,000	1	000	(c)	..	..	$1,200	..	..	..	..	1,400	..	..	..
133	Poughkeepsie, N. Y.	25,146	186	2,500	[g] 1	(c)	[e] 700	2	800	1,200	..	..	..	..	..	$600	..	(h)	..	..	..
134	Providence, R. I. [e]	198,635	21	[a] 5,000	1	2,000	2,000	2	1,000	[f] 2,000	2	1,000	1,600	..	..	1,200	..	..	..	1,200	..
					1	1,700															
135	Pueblo, Colo.	30,457	152	3,000	..	..	950	..	..	950	..	..	..	..	..	..	..	1,200	950	..	..
136	Quincy, Ill.	38,632	116	2,000	..	..	(c)	..	..	(c)	..	..	..	..	..	..	..	(c)	..	..	(c)
137	Quincy, Mass. [e]	28,076	162	2,500	..	..	740	..	..	900	..	..	..	..	..	..	..	..	800	..	..
138	Racine, Wis.	32,290	144	1,800	..	..	800	..	..	550	..	..	..	..	..	..	..	..	..	..	..
139	Reading, Pa.	89,111	48	2,500	..	..	650	..	..	650	1	550	..	..	..	..	..	..	..	..	..
140	Richmond, Va.	86,880	49	(c)	..	..	..	..	..	900	..	..	..	..	..	..	..	..	..	..	..
141	Rochester, N. Y.	182,028	33	5,000	1	2,000	1,200	1	1,000	1,300	..	..	..	..	..	..	..	(c)	750	(c)	..
142	Rockford, Ill.	34,621	137	2,200	..	..	..	..	..	900	..	..	..	..	..	..	..	..	..	..	..
143	Sacramento, Cal.	30,732	155	2,250	..	..	1,000	..	..	1,000	..	..	..	..	..	..	..	..	..	..	..
144	Saginaw, Mich (East Side)	47,676	92	2,200	..	..	1,000	..	..	1,000	..	..	..	..	..	[d] 500	..	..	550	..	..
145	St. Joseph, Mo.	115,479	36	2,800	1	1,800	1,125	..	..	900	..	..	675	..	..	(c)	..	..	..	..	..
146	St. Louis, Mo. [i]	636,973	3	5,500	2	4,000	[f] 2,048	2	720 to 1,320	[f] 1,968	2	[d] 480 to 1,320	[d] 896	..	[d] $640 to 724	..	..	[f] 1,200	[f] 632	[f] 2,048	[f] 800
					2	3,600															
					[g] 1	1,968															
147	St. Paul, Minn. [k]	197,023	22	4,000	1	1,800	1,500	..	..	1,600	..	..	1,400	1	750	..	..	1,000	800	..	..
148	Salem, Mass. [e]	37,027	126	(c)	..	..	1,500	..	..	1,200	..	..	..	..	..	..	..	..	..	..	..
149	Salt Lake City, Utah [e]	59,914	75	[k] 4,000	1	1,762	675	..	..	1,500	..	..	..	..	..	..	..	1,500	800	..	..
150	San Antonio, Tex. [e]	61,146	72	2,700	..	..	..	..	..	..	..	..	..	..	..	..	$1,170	1,300	1,200	..	720
151	San Francisco, Cal. [e]	364,677	9	4,000	4	1,800	1,620	1	900	1,620	1	900	1,800	1	1,200	..	..	1,800	..	..	1,500
152	Savannah, Ga.	67,311	64	(c)	1	(c)	..	..	..	..	..	..	(c)	..	..	..	..	..	..	..	..

153	Schenectady, N. Y..	88,195	78	2,500	..	..	..	800	1	750	650	1	500	650	1	250	.....	.....	.....	.....	.....	.....	.....
154	Scranton, Pa...	116,111	35	3,500	..	..	..	1,400	1	800	1,200	..	.....	.....	..	.....	.....	.....	.....	.....	.....	.....	.....
155	Seattle, Wash. [c] ...	99,586	41	4,000	.	.	.	[f] 1,350	..	..	[f] 1,350	.	.....	.....	..	.....	.....	.....	.....	[l] 1,200	.....	.....	.....
156	Sioux City, Iowa.....	40,952	311	2,400	..	..	..	900	..	..	900	..	.....	.....	..	.....	.....	.....	.....	.....	.....	.....	.....
157	Somerville, Mass. [c]..	69,272	62	3,000	.	.	.	1,000	[d] 1	1,000	1,700	1	900	.....	.	.....	1,500	.....	[m] 1,700	650	.....	.....	.....
									[d] 1	800													
158	South Bend, Ind.....	43,304	100	(c)	.....	.....	.....	(c)	.....	.....	(c)	..	.....	(c)	.....	.....	(c)	.....	.....	.....	.....	.....	.....
159	South Omaha, Nebr.....	34,971	136	2,200	.....	.....	.....	.....	.....	.....	.....	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
160	Spokane, Wash.....	45,313	97	3,000	..	..	..	(c)	.....	.....	810	..	.....	.....	.....	.....	810	.....	.....	.....	.....	.....	.....
161	Springfield, Ill.....	38,234	120	2,400	..	..	..	1,000	..	..	1,000	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000
162	Springfield, Mass.....	73,540	59	4,000	1	2,000	1,700	1	700	1,500	1	700	1,500	.....	.....	1,200	.....	1,400	[d] 700	(n)	800
163	Springfield, Ohio [f].....	41,433	109	2,500	.....	.....	1,200	.....	.....	1,200	.....	.....	.....	.....	.....	1,000	1,000	.....	.....	.....	.....
164	Superior, Wis	35,651	131	2,200	.....	.....	900	.....	.....	880	.....	.....	.....	.....	.....	.....	.....	1,800	750	.....	.....
165	Syracuse, N. Y.	117,124	34	4,000	1	1,300	1,100	..	.....	1,200	1	1,000	1,200	.....	.....	.....	.....	1,000	800	1,200	800
166	Tacoma, Wash.	51,962	85	2,000	.....	.....	950	.....	.....	[o] 1,000	.....	.....	[o]	.....	.....	.....	.....	.....	.....	.....	.....
167	Taunton, Mass. [c]..	30,937	149	2,400	.....	.....	1,000	..	.....	1,000	.....	.....	.....	.....	.....	.....	.....	750	650	.....	.....
168	Terre Haute, Ind.....	51,903	86	(c)	3	(c)	950	.....	.....	880	.....	.....	.....	900	.....	.....	.....	.....	.....	.....	.....
169	Toledo, Ohio.....	155,287	25	4,000	.....	.....	(c)	.....	.....	(c)	1	(c)	(c)	.....	.....	.....	.....	713	.....	.....	.....
170	Topeka, Kans.....	37,641	125	(c)	.....	.....	930	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	540	.....	.....	.....
171	Trenton, N. J...	84,180	51	2,800	.....	.....	900	.....	.....	1,100	.....	.....	.....	1,100	.....	.....	.....	.....	.....	1,000	.....
172	Troy, N. Y..... ...	76,222	56	2,500	1	750	1,200	1	800	1,800	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
173	Utica, N. Y. [f]..... .	63,648	68	3,300	.....	.....	1,100	2	700	1,350	..	.....	.....	.....	.....	700	.....	(c)	(c)	1,000	900
174	Waltham, Mass	26,282	172	2,200	.....	.....	1,080	1	600	1,000	.....	.....	.....	1,000	1	450	.....	.....	650	.....	800
175	Washington, D. C. [k]	302,883	15	5,000	2	3,000	[q] 2,000	(r)	650 to 1,100	[q] 2,000	(r)	650 to 1,100	[q] 2,000	(r)	650 to 1,100	.....	.....	[p] 2,700	[q] 1,750	[q] 1,750	[q] 1,750
					1	[p] 2,700																	
176	Waterbury, Conn..	60,100	74	3,000	1	(c)	850	.....	.....	750	1	500	.....	.....	.....	.....	.....	.....	.....	.....	650
177	Watertown, N. Y.....	25,276	182	2,400	..	.....	550	.....	.....	700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
178	West Hoboken, N. J.....	29,082	157	2,100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
179	Wheeling, W. Va. [f].....	41,058	110	2,100	.....	.....	.....	.....	.....	1,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
180	Wichita, Kans.....	31,110	147	2,000	.....	.....	(d)	.....	.....	810	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
181	Wilkes-Barre, Pa....	58,721	77	3,000	.....	.....	.....	.....	.....	1,080	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
182	Williamsport, Pa.....	29,572	155	2,200	.....	.....	.....	.....	.....	405	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
183	Wilmington, Del.....	83,860	62	2,200	1	(c)	1,000	.	.....	1,000	.....	.....	.....	.....	.....	.....	.....	1,000	900	.....	.....
184	Woonsocket, R. I.....	32,196	145	2,000	.....	.....	750	..	.....	1,100	.....	.....	.....	.....	.....	300	.....	.....	.....	.....	.....
185	Worcester, Mass. [c].....	128,135	29	4,000	.....	.....	1,900	1	1,300	1,900	1	1,000	1,100	.....	.....	.....	.....	1,850	025	1,150	650
								2	900		1	800											
186	Yonkers, N. Y. [f].....	61,405	71	(c)	.....	.....	1,450	1	850	1,800	1	800	900	1	900	.....	.....	1,100	775	850	800
								1	800		1	725		1	700								
187	York, Pa.....	38,258	119	2,000	.....	.....	765	..	.....	225	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
188	Youngstown, Ohio.....	51,516	87	2,800	.....	.....	1,200	.....	.....	1,200	.....	.....	.....	.....	.....	1,200	.....	1,200	.....	.....	.....

[a] For 1907.
[b] Director of high schools.
[c] No datum as to salary.
[d] Half time.
[e] Salary schedule for 1906.
[f] Supervisor of drawing is also supervisor of writing.
[g] Supervisor of primary.
[h] Supervisor of drawing is also supervisor of manual training.
[i] Maximum.
[j] Salary schedule for 1905.
[k] Salary schedule for 1907.
[l] Special teacher in high school.
[m] Submaster in charge of manual training department in high school.
[n] Supervisor of primary grades and kindergartens.
[o] Supervisor of music is also supervisor of physical training.
[p] Maximum after five years service; minimum, $2,200.
[q] Maximum after five years service; minimum, $1,500.
[r] No data.

Salaries of school officers and teachers in cities of 25,000 inhabitants and upward, 1905.

II.—SALARIES OF PRINCIPALS AND TEACHERS.

	City.	Normal or training school.		High school.		Elementary schools.			Kindergartens.	
		Principal.	Teachers.	Principals.	Teachers.	Supervising principals.	Principals.	Teachers.	Directors or principals.	Teachers.
	1	2	3	4	5	6	7	8	9	10
1	Akron, Ohio			$1,800	$750 to $1,200		$700 to $1,200	$300 to $625		$300 to $625
2	Albany, N. Y.[a]	$2,500	$400 to $900	3,000	750 to 2,500		1,200 to 1,000	400 to 700		400 to 650
3	Allegheny, Pa.[a]			2,500	750 to 1,400		850 to 2,100	500 to 900		550 to 750
4	Allentown, Pa			1,200	550 to 1,200		465 to 700	390 to 650		
5	Altoona, Pa			1,200	675 to 900		705 to 990	333 to 675		(b)
6	Atlanta, Ga			2,000	700 to 1,500		650 to 1,200	250 to 650		
7	Atlantic City, N. J			1,500	650 to 950		625 to 750	447 to 550		
8	Auburn, N. Y			2,500	550 to 2,000		600 to 1,500	300 to 750		(b)
9	Augusta, Ga			1,800	675 to 675		863 to 1,200	289 to 675		360 to 600
10	Aurora, Ill. (east side)			1,800	600 to 1,200		550 to 1,000	325 to 725		
	Aurora, Ill. (west side)			(c)	(b)		(b)	350 to 800		
11	Baltimore, Md	2,400	1,000 to 1,200	2,400	504 to 2,200	$1,800 to $1,800	700 to 1,500	348 to 1,008		200 to 504
12	Bay City, Mich.[a]			1,700	650 to 1,000		625 to 800	300 to 600		500 to 500
13	Bayonne, N. J			1,900	710 to 1,450		1,900 to 1,900	400 to 850		510 to 635
14	Binghamton, N. Y			2,500	500 to 1,500		700 to 1,200	360 to 700		360 to 500
15	Birmingham, Ala.[a]			$630 and 2,000	450 to 1,200		630 to 1,500	360 to 630		
16	Bloomington, Ill			1,600	450 to 1,100		590 to 810	360 to 585		
17	Boston, Mass.[d]	3,780	1,140 to 3,204	3,780 to 4,200	900 to 3,060		2,580 to 3,180	552 to 1,212	$624 to $792	432 to 624
18	Bridgeport, Conn			2,500	650 to 1,200		650 to 1,600	425 to 900		
19	Brockton, Mass			2,100	700 to 1,500		600 to 2,000	450 to 600		
20	Buffalo, N. Y.[a]	1,800	775 to 775	2,000 to 2,500	450 to 1,600		700 to 2,000	400 to 800		300 to 700
21	Burlington, Iowa			1,500	500 to 1,200		855 to 1,100	285 to 570	475 to 570	285 to 380
22	Butte, Mont			2,200	1,000 to 1,250		1,000 to 1,300	560 to 900		
23	Cambridge, Mass.[a]	2,800	250 to 1,000	3,000	500 to 2,000		770 to 2,300	450 to 1,400	700 to 700	450 to 700
24	Camden, N. J.[a]			1,400	800 to 900	1,000 to 1,450	600 to 1,450	440 to 725		440 to 520
25	Canton, Ohio			1,520	713 to 1,140		808 to 950	523 to 618		428 to 428
26	Cedar Rapids, Iowa			1,550	450 to 900		720 to 1,125	225 to 630		270 to 473
27	Charleston, S. C			1,900	600 to 600		750 to 1,500	300 to 540		
28	Chattanooga, Tenn			1,200	585 to 765		585 to 900	272 to 504		
29	Chelsea, Mass			2,800	300 to 1,800		700 to 1,800	200 to 650		(b)
30	Chester, Pa.[a]	570	(b)	1,520	570 to 808		570 to 1,200	380 to 570		
31	Chicago, Ill	5,000	1,000 to 2,500	2,800 to 3,000	750 to 2,400		1,200 to 2,500	550 to 1,125		550 to 950
32	Cincinnati, Ohio[a]			2,100 to 2,600	800 to 2,100		1,400 to 2,100	450 to 850		100 to 650
33	Cleveland, Ohio[d]	3,000	1,000 to 2,000	2,500 to 3,500	1,000 to 2,200		900 to 1,700	500 to 900	675 to 800	500 to 650
34	Colorado Springs, Colo			1,900	780 to 1,150		780 to 1,600	540 to 780		(b)
35	Columbus, Ohio	1,500	750 to 1,000	1,615 to 1,900	e 808 to 1,400		855 to 1,250	487 to 750		
36	Council Bluffs, Iowa			1,700	675 to (f)		630 to 900	495 to 585		315 to 540
37	Covington, Ky			1,250 and 1,600	850 to 1,250		1,250 to 1,250	400 to 650	500 to 500	400 to 400

38	Dallas, Tex.					855 and	1,500	720 to	1,080			810 to	1,242	450 to	652				
39	Davenport, Iowa						1,800	900 to	1,100			1,000 to	1,300	400 to	650				
40	Dayton, Ohio[g]	1,425		810 to	810		2,000	855 to	1,425			1,425 to	1,425	315 to	720			380 to	665
41	Denver, Colo.[a]					2,300 to	3,200	760 to	1,900			950 to	2,000	635 to	1,010			325 to	550
42	Des Moines (west side), Iowa					1,350 to	2,400	(b)				(b)		(b)				(b)	
43	Detroit, Mich.	(c)		550 to	850	2,600 to	3,500	850 to	1,800			850 to	1,800	400 to	725	725 to	725	350 to	500
44	Dubuque, Ia.[a]						2,000	600 to	1,100			600 to	1,600	300 to	600	350 to	450	250 to	300
45	Duluth, Minn.						3,000	700 to	1,250			750 to	1,150	400 to	725			500 to	600
46	Easton, Pa.						1,400	700 to	1,300			450 to	850	375 to	625				
47	East Orange, N. J.						2,900	800 to	1,800			1,900 to	2,500	575 to	800			450 to	675
48	East St. Louis, Ill.						1,600	750 to	1,200			750 to	1,200	400 to	700				
49	Elizabeth, N. J.						2,700	675 to	1,000			1,000 to	1,800	400 to	1,000				
50	Elmira, N. Y.						2,300	300 to	725			900 to	1,450	300 to	500				
51	Erie, Pa.[g]						2,500	693 to	1,860			570 to	807	332 to	570	380 to	380	332 to	352
52	Evansville, Ind.						1,800	(b)				800 to	1,200	350 to	650			500 to	600
53	Everett, Mass.[g]						2,500	450 to	1,500			650 to	1,500	400 to	600				
54	Fall River, Mass.						3,000	800 to	2,000			560 to	1,600	320 to	640			360 to	480
55	Fitchburg, Mass.[g]						2,000	600 to	1,350			625 to	1,200	450 to	625				
56	Fort Wayne, Ind.						2,000	650 to	1,200			600 to	1,100	383 to	600			350 to	400
57	Fort Worth, Tex.[g]						1,500	720 to	900			810 to	1,125	360 to	675				
58	Galveston, Tex.						2,000	680 to	1,300			680 to	1,572	452 to	723				
59	Gloucester, Mass.						2,300	500 to	1,000			450 to	1,500	300 to	525				
60	Grand Rapids, Mich.[g]						2,500	600 to	1,500			670 to	2,300	350 to	850			350 to	625
61	Hamilton, Ohio						1,700	570 to	903			665 to	1,140	380 to	713				
62	Harrisburg, Pa.	900		(b)		1,560 and	2,000	850 to	1,100	525 to	1,000	550 to	800	345 to	666				
63	Hartford, Conn.						4,000	800 to	2,500			1,200 to	1,200	400 to	1,000			500 to	900
64	Haverhill, Mass.[g]						2,200	600 to	1,600			650 to	1,300	425 to	625			250 to	500
65	Hoboken, N. J.[d]	2,400		900 to	1,500	2,000 to	2,400	1,000 to	1,500			1,800 to	2,200	600 to	1,000			(b)	
66	Holyoke, Mass.[g]						2,400	500 to	1,500			700 to	2,000	450 to	700	400 to	550	350 to	450
67	Houston, Tex.[a]						1,800	765 to	1,000			1,125 to	1,200	405 to	720				
68	Indianapolis, Ind.	(c)		700 to	1,000	2,500 to	2,600	700 to	1,800	1,200 to	1,500	700 to	1,200	400 to	800				
69	Jackson, Mich.					900 and	1,500	500 to	900			450 to	1,100	400 to	600			(b)	
70	Jacksonville, Fla.						1,200	640 to	640			320 to	720	240 to	600				
71	Jamestown, N. Y.						1,800	600 to	900			525 to	1,100	325 to	600			375 to	450
72	Jersey City, N. J.[a]	2,800		408 to	1,500		2,900	800 to	2,400			1,200 to	2,500	408 to	1,190			552 to	552
73	Johnstown, Pa.						1,300	720 to	1,000			675 to	945	360 to	630				
74	Joliet, Ill.					(d)		(b)				430 to	900	338 to	523				
75	Joplin, Mo.						1,080	540 to	630			540 to	810	270 to	473				
76	Kalamazoo, Mich.						1,300	350 to	1,125			600 to	950	340 to	525	625 to	625	320 to	460
77	Kansas City, Kans.						1,500	360 to	1,100			540 to	1,080	360 to	513				
78	Kansas City, Mo.[g]					2,200 to	3,300	750 to	1,800			800 to	1,800	500 to	825			500 to	600
79	Kingston, N. Y.[a]	700		(b)			2,500	600 to	1,100			900 to	1,900	450 to	600				
80	Knoxville, Tenn.						855	333 to	570			380 to	665	200 to	513				
81	La Crosse, Wis.						1,700	625 to	1,000			1,100 to	1,300	400 to	600				
82	Lancaster, Pa.					600 to	1,200	525 to	900			430 to	660	350 to	525			(b)	

[a] Salary schedule for 1905.
[b] No data as to salaries.
[c] No datum as to salary.
[d] Salary schedule for 1907
[e] A college graduate of unusual promise may be given an initial salary of $1,200.
[f] No datum as to maximum.
[g] Salary schedule for 1906.

Salaries of school officers and teachers in cities of 25,000 inhabitants and upward, 1905—Continued.

II.—SALARIES OF PRINCIPALS AND TEACHERS—Continued.

	City.	Normal or training school.		High school.		Elementary schools.			Kindergartens.	
		Principal.	Teachers.	Principals.	Teachers.	Supervising principals.	Principals.	Teachers.	Directors or principals.	Teachers.
	1	2	3	4	5	6	7	8	9	10
83	Lawrence, Mass.	$1,100	$600 to $750	$2,800	$500 to $1,600		$500 to $2,000	$400 to $600		
84	Lexington, Ky. [a]			$1,200 and 2,000	650 to 650		000 to 1,200	400 to 600	$500 to $500	$250 to $400
85	Lima, Ohio			1,500	475 to 760		570 to 808	285 to 523		
86	Lincoln, Nebr.			2,000	540 to 855		630 to 819	369 to 617		594 to 617
87	Little Rock, Ark.			1,500	(b)		(b)	(b)		
88	Los Angeles, Cal. [c]	(d)	750 to 750	3,000	1,050 to 1,750		850 to 2,150	600 to 800	560 to 640	400 to 540
89	Louisville, Ky.	2,250	850 to 1,100	1,800 to 2,500	600 to 1,800		750 to 1,750	350 to 625		350 to 625
90	Lowell, Mass. [c]	2,000	900 to 900	3,000	650 to 2,500		600 to 2,000	500 to 600	500 to 500	450 to 500
91	Lynn, Mass.			2,500	700 to 1,800		625 to 1,800	450 to 625		
92	McKeesport, Pa.			1,450	720 to 1,050		1,000 to 1,500	405 to 540		
93	Macon, Ga. [c]	(d)	(b)	1,170	585 to 810		540 to 900	360 to 585		
94	Malden, Mass. [c]			2,400	500 to 1,500		700 to 1,800	450 to 700		
95	Manchester, N. H.			2,000	600 to 1,800		600 to 1,500	350 to 575		(b)
96	Memphis, Tenn.			1,500	675 to 945		855 to 1,125	360 to 765		
97	Meriden, Conn.			2,000	500 to 1,200		600 to 1,650	350 to 700		(b)
98	Milwaukee, Wis. [c]			2,000 to 2,500	700 to 1,700		700 to 1,700	400 to 900	400 to 600	400 to 500
99	Minneapolis, Minn. [c]			2,300 to 2,700	600 to 1,500		800 to 1,575	450 to 800		300 to 700
100	Mobile, Ala.			1,250 and 1,464	520 to 1,080		520 to 1,208	432 to 520		320 to 480
101	Montgomery, Ala.			890 and 1,200	600 to 1,000		240 to 800	120 to 500		
102	Muncie, Ind.			1,260	450 to 720		540 to 675	410 to 495		
103	Nashua, N. H.			2,000	700 to 900		600 to 1,100	400 to 450	425 to 425	(b)
104	Nashville, Tenn.			1,100 and 2,250	650 to 1,550		700 to 1,550	300 to 850		
105	Newark, N. J. [c]	3,300	900 to 1,800	4,000	900 to 2,500		1,000 to 2,500	520 to 1,000	520 to 900	520 to 850
106	New Bedford, Mass. [c]	1,900	675 to 1,200	3,000	1,000 to 1,900		700 to 1,900	475 to 750		500 to 600
107	New Britain, Conn.			2,700	650 to 1,350		500 to 1,600	380 to 625		380 to 480
108	Newburgh, N. Y.			1,500	600 to 1,000		900 to 1,300	450 to 900		
109	Newcastle, Pa.			1,400	675 to 1,000		720 to 900	270 to 630		
110	New Haven, Conn.			3,200	400 to 2,000	$1,200 to $2,300	500 to 850	300 to 900	600 to 600	300 to 500
111	New Orleans, La.	1,200	765 to 900	1,200 to 1,800	585 to 1,350		585 to 990	315 to 585		315 to 540
112	Newport, Ky. [a]			1,140	730 to 730		550 to 900	350 to 617		
113	Newport, R. I. [a]			3,000	900 to 2,000		520 to 1,500	400 to 800		
114	Newport News, Va.			900	585 to 675		405 to 675	360 to 450		
115	Newton, Mass.			3,250	600 to 2,600		1,000 to 2,000	350 to 750		300 to 625
116	New York, N. Y.	5,000	1,000 to 3,000	1,900 to 5,000	700 to 3,500		1,440 to 3,500	600 to 2,400		600 to 1,240
117	Niagara Falls, N. Y. [a]			1,800	500 to 1,100		600 to 1,450	300 to 500		400 to 550
118	Norfolk, Va.			2,000	550 to 1,400		750 to 1,400	320 to 650		
119	Oakland, Cal.			2,262 and 3,012	1,092 to 1,617		1,200 to 2,000	660 to 912		700 to 900

120	Omaha, Nebr.a				2,400	665 to 1,800			760 to 1,425	380 to 760	475 to 665	380 to 475				
121	Orange, N. J.a			(f)		700 to 1,650			700 to 1,650	450 to 650		(b)				
122	Oshkosh, Wis.				1,500	500 to 1,100			650 to 1,200	375 to 600		150 to 400				
123	Passaic, N. J				1,900	700 to 1,200			750 to 1,000	425 to 700						
124	Paterson, N. J.a	2,000	450 to 1,500		2,200	900 to 1,500			900 to 1,800	410 to 725		425 to 575				
125	Pawtucket, R. I.				2,200	600 to 1,800			500 to 1,300	360 to 600		400 to 560				
126	Peoria, Ill.				2,500	600 to 1,700			1,200 to 1,800	350 to 600						
127	Perth Amboy, N. J				1,100	700 to 1,000			700 to 900	420 to 700						
128	Philadelphia, Pa	4,000	500 to 3,000	2,500 to	4,000	550 to 3,000		(g)	815 to 2,500	470 to 1,250		470 to 770				
129	Pittsburg, Pa.				3,000	1,000 to 1,900			900 to 2,300	350 to 1,200						
130	Pittsfield, Mass.				2,000	600 to 1,400			680 to 1,500	320 to 480		315 to 428				
131	Portland, Me. c	1,250	475 to 525	1,800 and	2,000	550 to 1,500			600 to 1,800	350 to 600		350 to 400				
132	Portland, Oreg. c				2,400	900 to 1,200			800 to 1,800	580 to 850						
133	Poughkeepsie, N. Y.				2,000	700 to 1,100			825 to 1,200	425 to 700		100 to 650				
134	Providence, R. I. c	(d)	900 to 1,100	2,500 to	3,000	700 to 2,000			1,800 to 2,200	500 to 900		500 to 700				
135	Pueblo, Colo. (district No. 1)h				2,800	780 to 1,950			713 to 1,350	550 to 1,750						
136	Quincy, Ill.			(d)		(b)		(b)	(b)	(b)						
137	Quincy, Mass.				2,200	900 to 1,100			1,400 to 1,400	400 to 600						
138	Racine, Wis.				1,800	900 to 1,200			1,000 to 1,400	326 to 650	550 to 550	300 to 450				
139	Reading, Pa.			1,400 and	1,800	800 to 1,500			(f)	380 to 670						
140	Richmond, Va.	1,500	540 to 540	1,500 and	1,800	540 to 1,125			1,125 to 1,350	297 to 585		405 to 405				
141	Rochester, N. Y.	2,000	1,000 to 1,000		2,600	900 to 2,000			650 to 1,800	300 to 600		300 to 600				
142	Rockford, Ill.				2,000	500 to 1,100			450 to 1,300	300 to 500						
143	Sacramento, Cal.				2,800	1,000 to 1,800			900 to 1,750	700 to 1,000		500 to 650				
144	Saginaw, Mich.				1,800	660 to 1,400			760 to 1,100	300 to 600						
145	St. Joseph, Mo.			900 and	1,998	405 to 1,485			585 to 878	315 to 540						
146	St. Louis, Mo. a	(d)	(b)	3,500 to	3,600	688 to 2,472			640 to 2,400	420 to 1,000	528 to 780	400 to 448				
147	St. Paul, Minn. h	1,800	700 to 1,200	2,000 to	3,000	660 to 1,200			800 to 1,600	450 to 800	650 to 800	450 to 600				
148	Salem, Mass. c	(d)	(b)		2,500	600 to 1,500			650 to 1,800	500 to 600	500 to 500	250 to 250				
149	Salt Lake City, Utah c			1,565 and	2,500	628 to 1,092			678 to 1,565	360 to 720						
150	San Antonio, Tex. c				1,800	900 to 1,320			900 to 1,350	408 to 600						
151	San Francisco, Cal. c			2,100 to	3,000	1,200 to 1,800			1,260 to 2,100	720 to 840						
152	Savannah, Ga.				2,000	1,100 to 1,800			1,000 to 1,800	400 to 725						
153	Schenectady, N. Y.				2,000	600 to 1,200			630 to 1,500	375 to 600		375 to 600				
154	Scranton, Pa.				2,800	750 to 1,700			700 to 980	400 to 650		450 to 500				
155	Seattle, Wash. c				1,850	800 to 1,350			900 to 1,800	540 to 864		540 to 864				
156	Sioux City, Iowa.				1,800	540 to 720			630 to 1,200	360 to 540						
157	Somerville, Mass. a				3,000	900 to 2,000			725 to 1,900	200 to 725	600 to 600	275 to 600				
158	South Bend, Ind.			(d)		(b)			(b)	(b)		(b)				
159	South Omaha, Nebr.				1,200	675 to 810			675 to 765	540 to 630						
160	Spokane, Wash.				1,500	720 to 1,150			774 to 1,206	360 to 720		540 to 720				
161	Springfield, Ill.				1,800	800 to 1,650			650 to 1,500	300 to 600						
162	Springfield, Mass. c			3,000 and	3,500	600 to 2,200			700 to 2,000	375 to 850	550 to 600	400 to 400				
163	Springfield, Ohio.				1,400	800 to 1,100			700 to 1,300	300 to 600						
164	Superior, Wis.			1,235 and	1,500	618 to 855			760 to 1,100	323 to 665		238 to 663				
165	Syracuse, N. Y.	2,000	1,100 to 1,100	2,500 and	3,000	550 to 2,100			700 to 1,800	300 to 650		350 to 550				
166	Tacoma, Wash.				1,800	600 to 1,050			800 to 1,400	500 to 750						

a Salary schedule for 1905.
b No data as to salaries.
c Salary schedule for 1906.
d No datum as to salary.
e Salary schedule for 1900.
f Superintendent is principal of high school.
g Supervising principals receive from $200 to $600 above sum to which they would be entitled as regular principals.
h Salary schedule for 1907.
i Minimum after five successive promotions.
j Principals receive 25 cents per month for each room in addition to salary to which they would be entitled as teachers.

Salaries of school officers and teachers in cities of 25,000 inhabitants and upward, 1905—Continued.

II.—SALARIES OF PRINCIPALS AND TEACHERS—Continued.

	City.	Normal or training school.		High school.		Elementary schools.			Kindergartens.	
		Principal.	Teachers.	Principals.	Teachers.	Supervising principals.	Principals.	Teachers.	Directors or principals.	Teachers.
	1	2	3	4	5	6	7	8	9	10
167	Taunton, Mass.[a]			$2,000	$700 to $1,400		$575 to $1,600	$300 to $600		
168	Terre Haute, Ind			1,700	650 to 1,000		600 to 1,100	410 to 650		(b)
169	Toledo, Ohio	$1,500	$600 to $1,500	$1,500 and 2,000	600 to 1,500		700 to 1,100	350 to 750		$350 to $600
170	Topeka, Kans			(c)	(b)		(b)	(b)		
171	Trenton, N. J.[d]	(c)	600 to 650	2,300	750 to 1,100		700 to 1,500	400 to 750		(b)
172	Troy, N. Y	1,000	(b)	2,500	750 to 1,600		500 to 1,200	350 to 600	$650 to $650	400 to 550
173	Utica, N. Y.[d]			2,500	650 to 1,500		575 to 1,800	400 to 600	400 to 525	300 to 350
174	Waltham, Mass			2,000	700 to 1,500		620 to 1,800	500 to 700		
175	Washington, D. C.[e]	[f] 2,500	1,000 to 1,800	2,000 to 2,300	1,000 to 2,200	$2,200 to $2,700	1,000 to 1,800	600 to 1,350	650 to 900	500 to 600
176	Waterbury, Conn	(c)	(b)	2,300	750 to 1,400		700 to 1,900	400 to 700		(b)
177	Watertown, N. Y			2,000	650 to 1,200		440 to 600	320 to 600		350 to 450
178	West Hoboken, N. J			(c)	1,050 to 1,050		1,045 to 1,465	315 to 945		(b)
179	Wheeling, W. Va.[d]			1,600	720 to 1,000		1,200 to 1,300	387 to 570		
180	Wichita, Kans			(c)	(b)		(b)	(b)		
181	Wilkes-Barre, Pa			1,900	750 to 1,200		650 to 1,250	360 to 600		500 to 500
182	Williamsport, Pa			1,700	450 to 1,400		540 to 1,000	405 to 630		
183	Wilmington, Del	(c)	(b)	1,200 and 1,900	500 to 1,000		400 to 850	350 to 600		
184	Woonsocket, R. I			1,500	350 to 1,000		525 to 1,300	325 to 525		350 to 425
185	Worcester, Mass.[a]			3,000	700 to 2,400	2,100 to 2,300	600 to 1,900	300 to 750		450 to 600
186	Yonkers, N. Y.[d]			3,000	700 to 1,700		800 to 2,000	600 to 1,000		(b)
187	York, Pa.[d]			1,500	495 to 900		450 to 585	342 to 405		
188	Youngstown, Ohio			2,200	1,000 to 1,400		600 to 1,200	300 to 650		400 to 750

[a] Salary schedule for 1906.
[b] No data as to salaries.
[c] No datum as to salary.
[d] Salary schedule for 1905.
[e] Salary schedule for 1907.
[f] Maximum; minimum, $2,000.

EDUCATION IN FOREIGN COUNTRIES.

Statistics of elementary education in foreign countries.

Country.	Date of report.	Enrollment in elementary schools.			Per-centage of total population.	Teachers.			Expenditure.			Population.	Date of census.	Chief officer of education.
		Boys.	Girls.	Total		Men.	Women.	Total.	Total.	Per capita of enrollment	Per capita of population.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EUROPE.														
Austria-Hungary	1903–4	3,571,019	3,516,222	7,087,241	16.6	88,301	31,874	120,175	.....	.....	.....	45,405,267	1900	No imperial or federal officer.
Austria	1903	1,890,040	1,872,040	3,762,080	14.4	63,770	24,385	88,155	$20,309,101	$5.63	$0.77	26,150,708	1900	Dr. R. Baron von Bienerth, minister of worship and public instruction.
Hungary (including Croatia and Slavonia).	1904	1,680,979	1,644,176	3,325,155	17.2	24,531	7,489	32,020	[a] 2,604,000	.80	.14	19,254,559	1900	Dr. G. Lucas, minister of worship and public instruction.
Belgium	1904	437,925	421,511	859,436	12.14	8,425	9,424	[b] 18,397	[c] 6,852,081	7.97	.96	7,074,910	1904	M. de Trooz, minister of interior and instruction.
Bulgaria	1903–4	187,778	92,079	279,857	7.5	....		6,040	..	.....	..	3,744,283	1900	Dr. J. Schichmanow, minister of public instruction.
Denmark	1903	.....	..	326,268	13.2	..	...	..	...	.	..	2,464,770	1901	Enevold Sörensen, minister of public instruction and ecclesiastical affairs.
France	1905	2,794,128	2,760,080	5,554,208	14.25	67,516	88,668	[d] 156,184	[e] 33,042,549	[e] 1.04	[e] .84	39,252,267	1905	M. A. Briand, minister of public instruction
German Empire	1901	..	..	9,256,731	16.5	122,145	22,339	144,484	99,743,306	11.42	1.77	56,367,178	1900	No imperial officer.
Prussia (Kingdom)	1901	..	...	5,670,870	17.3	76,342	13,866	90,208	64,240,246	11.35	1.86	34,472,509	1900	Dr. C. Studt, minister of ecclesiastical, educational, and medical affairs
Bavaria (Kingdom)	1901		..	873,399	14.2	12,184	2,715	14,899	9,464,308	10.83	1.53	6,176,057	1900	Dr. A. von Wehner, minister of worship and education.
Saxony (Kingdom)	1899		..	688,057	16.4	10,003	401	10,404	8,168,874	11.87	1.94	4,202,216	1900	Dr. P. von Seydewitz, minister of worship and education.
Wurttemberg (Kingdom)	1901		...	295,325	13.7	4,615	494	5,109	2,919,070	9.90	1.34	2,169,480	1900	Dr. von Weizsäcker, minister of worship and education.

[a] From State only.
[b] Includes 548 not classified by sex.
[c] The total expenditure on primary education, including administration, normal schools, classes for adults, and school gardens, was $8,773,490.
[d] 1903.
[e] 1903, by the State only, for public primary education, including infant schools and normal schools.

Statistics of elementary education in foreign countries—Continued.

Country.	Date of report.	Enrollment in elementary schools.			Percentage of total population.	Teachers.			Expenditure.			Population.	Date of census.	Chief officer of education.
		Boys.	Girls.	Total.		Men.	Women.	Total	Total.	Per capita of enrollment	Per capita of population.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EUROPE—continued.														
German Empire—Continued.														
Baden (Grand Duchy)	1900			273,149	14.5	3,631	418	4,049	$2,618,000	$9.84	$1.40	1,867,944	1900	Baron von Dusch, minister of justice, worship, and education.
Hesse (Grand Duchy)	1901			165,707	15.0	2,525	222	2,747	1,874,250	11.31	1.68	1,119,893	1900	Dr. H. Eisenhuth, president department of public instruction.
Mecklenburg-Schwerin (Grand Duchy).	1903			94,755	15.0	1,912	145	2,057	910,820	9.06	1.51	607,770	1900	Dr. Langfeld, minister of worship and education.
Saxe-Weimar (Grand Duchy)	1901			59,628	16.5	979	15	994	610,940	10.25	1.70	362,873	1900	Dr. C. Rothe, chief of department of worship and education.
Mecklenburg-Strelitz (Grand Duchy).	1903			16,057	15.0	348	34	382	127,568	8.00	1.24	102,602	1900	Dr. Piper, president of consistory.
Oldenburg (Grand Duchy)	1901			66,721	16.4	1,101	120	1,221	698,530	10.47	1.73	399,180	1900	Mr. F. P. Ruhstrat, chief of department of justice, worship, and education.
Brunswick (Duchy)	1902			81,396	17.3	1,142	151	1,293	801,898	10.50	1.84	464,333	1900	Dr. A Trieps, president school council.
Saxe-Meiningen (Duchy)	1901			44,011	17.5	650	54	710	467,191	10.61	1.86	250,731	1900	Mr. Fr. Trinks, chief of section of justice, worship, and education.
Saxe-Altenburg (Duchy)	1901			34,448	17.2	495	23	518	333,774	9.68	1.71	194,914	1900	Mr. Besser, director-general of schools.
Saxe-Coburg-Gotha (Duchy)	1902			39,442	17.2	625	70	704	420,070	10.61	1.83	229,550	1900	Dr. Bachof, chief of department of justice, worship, and education.
Anhalt (Duchy)	1902			52,684	16.7	814	154	968	564,298	10.73	1.78	316,085	1900	Mr. Rümelin, president of department of public instruction.
Schwarzburg-Sondershausen (Principality).	1901			13,918	17.2	211	7	218	137,802	9.90	1.69	80,896	1900	Mr. H. Petersen, chief of department of justice and education.

Schwarzburg-Rudolstadt (Principality).	1901			16,222	17.4	263	2	265	126,616	8.00	1.36	93,059	1900	Mr. C. von Holleben, chief of department of worship and education
Waldeck (Principality)	1901			10,294	17.8	166	6	172	85,442	8.30	1.47	57,918	1900	Baron von Hadeln, president of consistory
Reuss, senior line (Principality).	1901			13,206	19.3	162	19	181	93,296	7.00	1.37	68,306	1900	Mr. Hermannsgrün, inspector general of schools.
Reuss, junior line (Principality).	1901			21,702	15.6	317	20	337	194,684	9.00	1.40	139,210	1900	Mr. Graesel, minister of justice, worship, and education.
Schaumburg-Lippe (Principality).	1901			7,048	17.7	72	5	77	50,694	6.63	1.18	43,132	1900	Mr. Römers, president of consistory
Lippe (Principality)	1900			23,896	17.2	261		261	144,704	6.05	1.05	138,952	1900	Mr. Pustkuchen, president of consistory.
Lübeck (Free City)	1903			12,109	13.3	187	158	345	199,492	16.47	2.06	96,775	1900	Dr. E Ch. J. Schoen, president of school council.
Bremen (Free City)	1901			27,830	12.4	499	97	596	510,986	18.36	2.27	224,882	1900	Dr. D Ehmck, president of committee of instruction.
Hamburg (Free City)	1902			98,610	12.8	1,653	950	2,603	1,742,398	17.67	2.27	768,349	1900	Dr. W. von Melle, president of school council.
Alsace-Lorraine (Imperial Domain).	1901			226,103	13.2	2,896	2,329	5,224	2,110,822	9.34	1.20	1,719,470	1900	Dr. Albrecht, director of council of education.
Great Britain and Ireland:														
England and Wales	1904	3,036,700	2,987,843	6,024,542	17.03			160,736	[a] 65,025,810	10.79	1.90	[b] 34,152,977	1905	Rt. Hon. Augustine Birrell, president board of education.
Scotland	1904–5			804,162	17.19	5,572	14,941	20,513	10,812,030	13.44	2.31	[b] 4,676,603	1905	Rt. Hon. John Sinclair, vice-president of the committee of council on education in Scotland.
Ireland	1905	362,199	375,553	737,752	16.81	5,209	7,801	13,010	7,086,080	9.60	1.01	[b] 4,388,107	1905	Commissioners of national education in Ireland.
Greece	1902	153,000	47,570	210,570	8.0	3,546	800	4,346				2,433,806	1896	M. Stephanopoulos, minister of ecclesiastical affairs and instruction.
Italy	1901–2	1,434,844	1,298,505	2,733,349	8.2	21,178	44,561	65,739	13,209,080	4.83	.39	33,476,117	[c] 1905	Luigi Rava, minister of public instruction.
Netherlands	1904–5	432,634	412,462	[d] 845,096	15.3	15,107	8,336	23,443	8,213,335	9.72	1.49	5,509,659	[c] 1904	Dr. P. Rink, minister of interior.
Norway	1903			344,404	15.4	4,804	2,807	7,611	3,219,323	9.35	1.44	2,240,032	1900	Otto Jensen, minister of ecclesiastical affairs and public instruction.
Portugal	1902			240,000	4.4							5,423,132	1900	Hintze Ribeiro, premier and minister of interior.
Roumania	1902–3			[f] 445,041	7.5			5,905				5,956,690	1899	Sp. C. Haret, minister of public instruction and ecclesiastical affairs.
Russia	1902			4,692,152	3.3							141,403,200	1904	Privy councillor, Count Tolstoi, minister of public instruction.
Finland	1904	63,512	55,354	[g] 192,832 118,806	11.2	1,437	1,826	3,263				2,780,700	1904	

[a] 1902.
[b] Estimated.
[c] January 1.
[d] Includes public subsidized and nonsubsidized schools.
[e] December 31.
[f] Includes 72,072 pupils in "urban" schools.
[g] In ambulatory schools.

Statistics of elementary education in foreign countries—Continued.

Country.	Date of report.	Enrollment in elementary schools.			Percentage of total population.	Teachers.			Expenditure.			Population.	Date of census.	Chief officer of education.
		Boys.	Girls.	Total.		Men.	Women.	Total.	Total.	Per capita of enrollment	Per capita of population.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EUROPE—continued.														
Servia	1900	82,636	19,772	102,408	4.2			1,940				2,492,382	a1900	L. j. Stoyanowitch, minister of public instruction and ecclesiastical affairs.
Spain	1901			1,617,314	8.7				$8,322,505	$5.15	$0.45	18,618,086	1900	Santo Maria Paredes, minister of education.
Sweden	1903			732,899	14.3			17,994	6,655,724	8.84	1.26	5,260,811	a1904	Fridtjuv Berg, minister of ecclesiastical affairs and public instruction.
Switzerland	1904	341,222	301,863	643,085	19.3	8,602	5,540	14,142	9,118,517	14.19	2.70	3,325,023	1900	No federal officer.
ASIA.														
British India:														
Assam	1901-2	83,000	8,007	91,007	1.49	3,113	240	3,353	92,340	1.01	.015	6,126,343	1901	
Bengal	1901-2	1,212,000	100,322	1,312,322	1.75	48,538	2,000	50,538	1,231,524	.93	.016	74,744,866	1901	Mr. A. C. Martin, director of public instruction.
Berar	1901-2			48,878	1.77	1,312		1,312	90,720	1.85	.03	2,754,016	1901	
Bombay	1904-5			533,282	2.87				1,272,646	2.38	.068	18,559,561	1901	Mr. E. Giles, director of public instruction.
Burma (upper and lower)	1904-5	108,998	35,461	144,459	1.37				283,608	1.96	.027	10,490,624	1901	Mr. John Vansomeren Pope, director of public instruction.
Central provinces	1901-2			117,161	1.18			1,800	142,884	1.21	.014	9,876,646	1901	
Coorg	1901-2			4,898	2.71				6,156	1.25	.039	180,607	1901	
Madras	1904-5	665,943	46,020	711,963	1.86			27,051	755,654	1.06	.019	38,209,436	1901	Mr. A. J. Bourne, director of public instruction.
Myzore	1903-4			59,511	1.09							5,448,923	1901	Mr. H. J. Bhabha, inspector-general of education.
Northwest provinces and Oudh.	1901-2			381,663	.76			9,000	408,200	1.06	.008	49,817,262	1901	Mr. T. C. Lewis, director of public instruction.
Punjab	1901-2			114,836	.56			3,800	196,344	1.70	.009	20,330,339	1901	Mr. W. A. Bell officiating director of public instruction.

Ceylon	1904	140,502	65,403	205,905	5.39				262,768	1.27	.07	[b]3,812,931	1904	Mr. J. Kubota, assistant director of public instruction.
Japan	1903-4			5,084,099	10.9			108,360	15,816,711	3.11	.34	46,732,138	1903	Kubota Yuzuru, minister of state for education.
AFRICA.														
Cape of Good Hope	1905			100,278	7.02				1,748,465	10.28	.73	2,409,804	1904	Mr. Thomas Muir, superintendent-general of education.
Transvaal	1905			28,540	9.60			979	747,550	26.19	2.51	297,277	1904	Mr. J. E. Adamson, director of education.
Orange River Colony	1905			15,577	4.02			271	504,860	32.41	1.30	387,315	1904	Mr. Hugh Gunn, director of education.
Egypt	1901			211,378	2.2							9,734,405	1897	Hussein Pacha Fakhry, minister of public works and public instruction.
Natal	1899 1900			24,523	4.50				286,315	11.67	.52	543,913	1891	Mr. Robert Russell, superintending inspector of schools.
Mauritius	1902	12,420	6,423	18,843	5.02			343				375,381	1901	Mr. W. T. A. Emtage, director of public instruction.
NORTH AMERICA.														
British Columbia	1904-5			27,534	15.41			663	433,005	15.82	2.42	178,657	1901	Hon. Fredk. J. Fulton, minister of education.
Manitoba	1904			58,547	22.93	682	1,536	2,218	1,786,311	30.51	7.00	255,211	1901	Mr. Colin H. Campbell, chief of department of education.
New Brunswick	1903			65,278	19.71			1,816	631,817	9.67	1.90	331,120	1901	Mr. James R. Inch, chief superintendent of education.
Northwest Territories	1903			33,191	15.09			743	213,746	6.44	.07	220,000	1901	Hon. D. J. Goggin, minister of education.
Nova Scotia	1904			96,886	21.08	388	2,053	2,441	985,031	10.16	2.14	459,574	1901	Mr. A. H. Mackay, superintendent of education.
Ontario	1904			444,621	20.06			9,554	5,459,493	12.27	2.46	[b]2,215,854	1904	Hon. R. A. Pyne, minister of education.
Quebec	1904-5	162,982	172,786	335,768	20.36	302	6,593	6,895	2,372,371	7.06	1.43	1,648,898	1901	Hon. Boucher de la Bruère, superintendent of education.
Prince Edward Island	1905	10,427	8,845	19,272	18.66			570	168,592	8.74	1.63	103,259	1901	Hon. Alexander Anderson, LL. D., chief superintendent of education.
Newfoundland	1904			34,206	15.36				220,979	6.45	.99	222,643	1901	——, secretary of the board of education.
Mexico	1905			[c]739,600	5.4			18,600	4,210,256	5.69	.31	13,605,919	1900	Just. Sierra, minister of public instruction and fine arts.
Bermuda	1904			1,707	9.73				6,780	3.97	.38	17,535	1901	
WEST INDIES.														
Jamaica	1905-6			81,857	10.14				260,405	3.16	.32	[b]806,690	1905	Mr. Thomas Capper, superintending inspector of schools.
Trinidad	1902			32,858	12.87				197,790	6.01	.77	255,148	1899	Mr. Gervase Bushe, inspector of schools.
Cuba														

[a] December 31. [b] Estimated. [c] In schools supported by the Federation and States.

Statistics of elementary education in [illegible] countries.—Continued.

Country.	Date of report.	Enrollment in elementary schools. Boys.	Girls.	Total.	Percentage of total population.	Teachers. Men.	Women.	Total.	Expenditure. Total.	Per capita of enrollment.	Per capita of population.	Population.	Date of census.	Chief officer of education.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CENTRAL AMERICA.														
Costa Rica	1904	12,138	10,688	22,826	6.9	335	511	843				331,340	*1904	J. Astúa Aguilar, minister of foreign affairs, ecclesiastical affairs, public instruction, charities and justice, etc.
Guatemala	1903			36,477	2.0							1,842,134	1903	J. A. Mandujano, minister of public instruction.
Honduras	1902			30,025	4.0				$91,021	$2.03	$0.80	744,901	1901	Dr. A. L. B. Membreño, minister of justice and public instruction.
Nicaragua	1900			17,803	3.6				125,000	7.08	.25	500,000	1900	D. Adolfo Altamirano, minister of interior, justice, foreign affairs, public instruction, police, and ecclesiastical affairs.
Salvador	1893	16,663	12,764	29,427	2.9	453	340	793				1,006,848	*1901	Dr. José Rosa Pacas, minister of interior, public works, and public instruction.
SOUTH AMERICA.														
Argentina	1902			472,425	8.7			12,409	*12,065,085	26.81	2.34	5,410,028	*1904	J. V. Gonzales, minister of justice and public instruction.
Bolivia	1901			33,312	1.8			1,063	109,120	3.28	.06	1,816,271	*1900	Dr. J. Savacho, minister of justice and public instruction.
Brazil	1889			300,000	2.1							14,333,915	1890	Dr. J. J. Seabra, minister of interior and justice [and public instruction].
Chile	1903	81,655	85,273	166,928	5.2	1,176	2,432	3,608	1,298,822	7.78	.41	3,206,042	*1903	D. Fernandez, minister of justice and public instruction.
Colombia	1897			143,070	3.7				844,895	5.91	.22	3,917,000	(*)	Carlos Cuervo Márquez, minister of public instruction.

Ecuador	1894			76,378	6.4			1,656				1,205,600	(c)	A. Espinosa, minister of ecclesiastical affairs and public instruction and justice
Paraguay	1897			25,000	4.7			700				530,103	1899	C. Carreras, minister of ecclesiastical affairs and public instruction
Peru	1903			104,970	2.3			2,165	352,283	3.30	.08	4,009,999	1899	J. Polar, minister of justice, ecclesiastical affairs, and public instruction.
Uruguay	1902	30,224	26,193	56,417	5.8	222	950	1,172	799,655	14.17	.82	979,072	[f]1902	José Serrato, minister of agriculture, industries, public instruction, and public works
Venezuela	1891			100,026	3.9				483,232	4.83	.19	2,590,981	1904	Am. Morales, minister of public instruction.
AUSTRALASIA.														
New South Wales	1903			243,516	17.48			5,540	[g]4,307,720	17.68	3.09	1,392,572	1902	Hon. John Perry, minister of public instruction.
Queensland	1905			95,995	19.33	1,143	1,240	2,383	1,488,340	15.47	2.99	496,598	1901	Mr. A. H. Barlow, secretary for public instruction
South Australia	1905			59,026	16.28	422	996	1,420	745,915	12.64	2.06	362,604	1901	Hon. Thomas Price minister controlling education
Victoria	1904-5			210,200	17.37			4,662	2,728,240	12.98	2.26	[h]1,209,860	{1904 1905	{Hon. A. O. Sachse, minister of public instruction
West Australia	1905			27,966	15.13			688	[i]600,745	21.48	3.26	184,124	1904	Hon. Walter Kingsmill, minister of education
New Zealand	1905	71,980	65,673	137,623	16.04	1,272	1,797	3,069	[j]2,332,030	16.94	2.72	[k]857,539	1904	Rt. Hon. R. J. Seddon, minister of education
Tasmania	1903	9,883	8,713	18,596	10.78	226	366	592	303,860	16.33	1.76	172,475	1901	Hon. J. W. Evans, minister of education.

a December 31.
b March 1.
c Contributed to education in 1900.
d September 1.
e Recent estimation.
f December
g Includes $504,775 for [illegible] and buildings.
h Estimated.
i Includes $13,000 for building, repairs, and furniture.
j The total expenditure, including high schools, normal schools, sites, buildings, etc., was $3,421,120.

CHAPTER XII.

MISCELLANEOUS EDUCATIONAL TOPICS.

CONTENTS.—Instruction in forestry—The American system of agricultural education and research—The progress of educational reform in China.

INSTRUCTION IN FORESTRY.

The establishment of large forest reserves by the national and some of the State governments has created a demand for men well trained in the science of forestry to undertake the care, management, and development of such reserves; such specially trained men are likewise needed to take charge of large timber tracts owned by railroad and other corporations for the purpose of supplying timber for their needs.

For a long time the only instruction in forestry offered in this country was that in connection with the courses of study in agriculture in the land-grant colleges. This consisted, then as now, in the large majority of cases, of instruction in forestry of a very general nature, given, as a rule, about three times a week in one term of ten to twelve weeks, in either the junior or senior year of the course.

At the present time instruction in forestry is given by 44 institutions of high grade. Of this number, 37 are land-grant colleges established under the act of Congress approved July 2, 1862. In 36 of the 44 institutions the instruction forms a part of or may be elected in the regular agricultural or horticultural courses; 6 institutions offer regular four-year undergraduate courses in forestry, while in 2 institutions the instruction in forestry is intended only for students who have already completed an undergraduate college course of study.

The 6 institutions offering four-year undergraduate courses are the State universities of Iowa, Maine, Minnesota, Nebraska, and Ohio and the Michigan Agricultural College. These courses include a considerable amount of instruction in liberal studies, especially in modern languages, mathematics, and natural science. The technical study of forestry is generally limited to the last two years of the course.

The institutions whose work is limited to graduate students are Yale University and the University of Michigan.

The Yale Forest School of Yale University was founded in 1900 by a gift of $150,000 from Mr. and Mrs. James W. Pinchot and their sons. The endowment was increased by $50,000 in 1903 by Mr. and Mrs. James W. Pinchot and their son, Gifford Pinchot. The gift also provides for a summer school of forestry in Milford, Pa., where extensive facilities for field work are available. The work of the summer term of the junior year and of the spring term of the

senior year is done at Milford, Pa., where buildings for lecture and laboratory purposes have been erected.

The scope of the instruction in forestry offered by the several institutions and the amount of time given thereto are as follows:

Alabama Polytechnic Institute.—Under the department of botany seniors may select for research and thesis work a course in forestry or plant culture. Instruction is given by Edwin M. Wilcox, Ph. D., professor of botany.

Agricultural and Mechanical College for Negroes (Alabama).—Instruction in forestry is given during the winter term (twelve weeks) of the senior year in the agricultural course.

University of Arkansas.—Instruction in forestry (two hours per week, half year) is offered to third and fourth year students in the department of horticulture. The instruction is given by Ernest Walker, B. S. Agr., professor of horticulture.

Colorado Agricultural College.—The elements of forestry (five hours, thirteen weeks, senior year) is elective for agricultural students. Burton O. Longyear, B. S., is instructor in botany and forestry.

Yale University (Connecticut).—The regular course of study in the Yale Forest School extends through two years. The work is of an advanced and technical character and is designed for college graduates who already have had a thorough collegiate training in mathematics and natural science, and leads to the degree of master of forestry. The course of study is as follows:

Junior year.—Summer term: Surveying, two and one-half days per week; forest mensuration, two and one-half days per week. Fall term: Silviculture, two hours per week and field work; forest botany—general morphology of plants, six hours; physiography, two hours, with additional field work; mapping and office work, six hours; mechanical drawing, three hours. Winter term: Silviculture, two hours and field work; forest botany—general morphology of plants, six hours; forest physiography, two hours; mapping and office work, three hours; forest entomology, two hours; forest reserves, twelve lectures; forest hydrography, six lectures; State forest law, two hours. Spring term: Forest botany—plant physiology, six hours; silviculture, two hours lectures, eight hours field work; physiography, two hours and field work; diseases of trees, six hours.

Senior year.—Fall term: Forest technology, two hours lectures, six hours laboratory; forest management, four hours; forest administration and law, two hours; lumbering, four to five hours; lumber trade and transportation, six to eight lectures; road construction, one hour; preservation of timber, six lectures; history of forestry, two hours; forest policy, six lectures; methods of Government field work, four lectures; forest fires and grazing, lectures. Spring term: Field work in topographic surveying and forest management at Milford, Pa. Special lecture courses: Fish culture, twelve lectures; game preservation, four to six lectures; packing and pack transportation, two weeks; forest entomology, four to six lectures; forestry in the Philippine Islands, twelve lectures; scope of forest planting, six lectures.

The entire work of the spring term of the senior year is transferred to Milford, Pa., where also is conducted the summer school in forestry, which is intended for those who do not wish to take or who are not ready for the more advanced technical courses at regular forest schools. The course covers a period of seven weeks and includes instruction in forest botany, silviculture, forest mensuration, introduction to forestry, forest protection, forest regions of the United States.

The instruction in forestry is given by Henry S. Graves, A. M., director of the Yale Forest School and Pinchot professor of forestry; Gifford Pinchot, A. M., and James W. Toumey, M. S., professors of forestry; Roy L. Marston, M. F., assistant professor of forestry; Arthur H. Graves, A. B., instructor in forest botany; Alexander W. Evans, Ph. D., assistant professor of botany; Arthur L. Dean, Ph. D., instructor in plant physiology; George E. Nichols, A. B., assistant in botany; Harry D. Tiemann, M. F., assistant in forest technology; and a number of lecturers drawn largely from the Forest Service of the United States Department of Agriculture.

Connecticut Agricultural College.—Study of practical forest management; reproduction, growth, and maturity of forest trees; destructive agencies in the forests; care of farm forests; study of native forest trees. (Fourth year, twelve weeks, three hours.)

A two-year course in forestry has been arranged for fifth and sixth year students. Lectures are given on silviculture, fundamental principles of forestry, propagation of forest trees, forest planting, timber measurements, timber physics, treatment of farm forests, United States and State reservations, and kindred subjects. The instruction is given by Edward A. White, B. S., professor of botany, forestry, and landscape architecture.

University of Florida.—A course of lectures on the principles of forestry, influences of forestry on climate, fruit growing; forest cropping, protection, use of Florida woods, etc., are taken up. (Senior year, first semester, four hours, elective for natural history and agricultural students.) Instruction is given by F. M. Rolfs, M. S., professor of botany and horticulture.

Georgia State College of Agriculture and Mechanic Arts.—During the second term (half year) of the junior year two hours per week are given to instruction in forestry, entomology, apiculture, fungous diseases of plants, and vegetation.

North Georgia Agricultural College.—Lectures on forest influences and methods of forest management, timbers, and forest products in senior year of agricultural course.

University of Idaho.—A practical and scientific acquaintance with all of the common forest trees in the State, their uses, preservation, and abundance. (One semester, four hours per week.) Instruction is given by Louis F. Henderson, Ph. B., professor of botany.

University of Illinois.—Forest trees and their natural uses, their distribution, and their artificial production; relations of forest and climate; forestry legislation and economy. (One semester, two hours per week.) Instruction is given by Thomas J. Burrill, LL. D., professor of botany.

Purdue University (Indiana).—Effects of forests upon climate; reasons for forest tree planting; influence of forests on the evaporation of moisture from the soil; effects of forests on the water supply of springs, creeks, and rivers; methods of propagating forest trees; comparison of the growth of different species under cultivation. (Elective for seniors in agricultural course.) Instruction given by Stanley Coulter, Ph. D., professor of biology.

Iowa College of Agriculture and Mechanic Arts.—Undergraduate work in forestry is offered as follows: Elementary forestry (sophomore year, second semester, three hours); silviculture (junior year, second semester, three hours); forest management and policy (senior year, second semester, three hours); wood technology (senior year, second semester, three hours). Graduate work is offered in problem of tree planting, studies of the native timber growth, prevention of erosion and reclamation of flood-damaged lands by tree planting, studies in the artificial preservation of timber. Instruction is given by Hugh P. Baker, M. F., assistant professor of forestry.

University of Iowa.—The four-year course in forestry leads to the B. S. degree. The technical courses in forestry included are: Silviculture (senior year, three hours); forest products (junior year, first semester, two hours); forest mensuration (junior year, first semester, two and one-half hours); lumbering (senior year, first semester, three hours); forestry in the United States (senior year, first semester, five hours); forest management (senior year, first semester, three hours); forest protection (senior year, first semester, two hours); history of forestry (senior year, first semester, one hour). Instruction is given by Bohumil Shimek, M. S., professor of physiological botany.

Kansas State Agricultural College.—Instruction in forestry is offered as an elective in the winter term of the fourth year. It presents the general principles and methods of forestry dealing with the relations of forests to public welfare, and the means of regulating and preserving forests.

Graduate instruction is offered in dendrology, forest technology, silviculture, and forest management. The instruction is provided in the department of horticulture, Albert Dickens, M. S., professor of horticulture.

Berea College (Kentucky).—Instruction is offered throughout the senior year as follows: Forest botany (fall term, five hours); forest influences and forest utility (winter term, lectures, three hours, library and field, two hours); forest management (spring term, five hours). The forestry department has acquired 2,000 acres of mountain land for field study. Silas C. Mason, M. S., is professor of horticulture and forestry.

University of Maine.—The undergraduate course in forestry extends through four years and leads to the B. S. degree. The instruction in forestry included in the course is as follows:

Freshman year: General forestry (half year, three hours).

Sophomore year: Forest botany (two hours; field and laboratory work, four hours).

Junior and senior years: Silviculture (two hours through one year; field work equivalent to eight hours through a half year); forest measurements (half year, two hours; field work, half year, four hours); lumbering (half year, one hour; two weeks in lumber camp); forest management (quarter year, two hours); thesis work in forest management (half year, ten hours).

The woodland belonging to the university, together with adjacent land covered by a young forest, furnishes a field for the study of forest problems. Instruction is given by Samuel N. Spring, M. F., professor of forestry, and M. B. Cummings, M. S., instructor in botany.

Maryland Agricultural College.—Instruction in forestry is provided in the senior year, twelve weeks, three periods per week. The text-books are Roth's First Book of Forestry and Pinchot's Primer of Forestry. Instruction is given by W. N. Hutt, B. S. A., professor of horticulture.

Harvard University (Massachusetts).—Instruction is offered as follows: Elements of silviculture (half year, twice a week, with additional hours for field work); practical silviculture (half year, twice a week, with additional hours for field work); forest measurements (half year, twice a week, with additional hours for field and laboratory work); forest botany (twice a week through the year, with additional hours for field work); forest protection (half year, twice a week); forest history (half year, twice a week); lumbering (twice a week through the year); forest management (twice a week through the year, with additional hours for field work). The staff consists of Richard T. Fisher, M. F., and Austin Cary, A. M., assistant professors of forestry; Ralph C. Hawley, M. F., instructor in forestry; Daniel A. Clarke, B. A. S., and John G. Jack, instructors in forest botany.

Michigan Agricultural College.—The forestry course extends through four years, the freshman and sophomore years being the same as for agricultural students. In the junior and senior years the technical work in forestry requires from five to ten hours per week. The instruction in forestry is as follows:

Sophomore year: Elements of forestry (twelve weeks, two hours).

Junior year: Principles of forestry (twenty-four weeks, three hours); forest botany (through the year, two hours of class work, four hours of field work); wood technology (twelve weeks, eight hours of laboratory work); silviculture (twelve weeks, three hours of class work, four hours of field work).

Senior year: Forest mensuration (twelve weeks, eight hours of field work); economics of forestry (twelve weeks, two hours); forest protection and regulation (six weeks, two hours); diseases of trees (six weeks, two hours); investigation (twelve weeks, four hours, and twelve weeks, six hours); forest valuation (twelve weeks, three hours). The professor of forestry is Ernest E. Bogue, M. S., A. M.

University of Michigan.—With the exception of the course entitled "Introduction to Forestry," the instruction in forestry is not open to undergraduate students, but is intended only for graduate students, aiming to make forestry a profession. The instruction is as follows: Introduction to forestry (one semester, three hours); silviculture (three semesters, three hours); forest mensuration and description (one semester, four hours); forest utilization (one semester, four hours); forest management (one year, five hours); dendrology (one semester, three hours); timber physics (one semester, three hours); seminary (one year). The teachers are Filibert Roth, B. S., professor of forestry, and C. A. Davis, A. M., instructor in forestry.

University of Minnesota.—The forestry course extends through four years and leads to the B. S. degree. The freshman year is the same as that for the other students of the college of agriculture. The instruction in forestry is as follows:

Sophomore year: Forest entomology (one semester, three hours).

Junior year: Forest influence and utility (one semester, two hours); forest by-products (one semester, two hours); lumbering (one semester, two hours); wood technology and diseases of wood (one semester, three hours); forest mensuration and valuation (one semester, three hours); silviculture (one semester, two hours).

Senior year: Silviculture (one semester, three hours); forest economics (one semester, three hours); European forestry (one semester, one hour); forest administration (one semester, two hours); forest protection (one semester, two hours); fish culture, game protection (one semester, one hour); thesis, seminary in reading forestry literature (one semester, two hours).

Four practicums are required in the course, viz: In forest exploitation, forest working plans, forest mensuration, nursery practice. A thesis must be presented in each of the four subjects, giving the results of personal observation. Instruction is given by Samuel B. Green, B. S., professor of horticulture and forestry, and W. T. Cox, assistant instructor in forest valuation and lumbering.

Mississippi Agricultural and Mechanical College.—Instruction in forestry is given in the senior year of the course in horticulture, and research work in forestry is afforded to graduate students. The instruction is given by the department of horticulture, Alexander B. McKay, B. S., professor of horticulture.

University of Missouri.—An elective lecture course in forestry is offered in which are considered the influence of forests on climate, soil, and the flow of streams; management of forests; forest geography; forest mensuration; characteristics and uses of typical wood; specific characters of our principal forest trees in their winter condition; brief review of principal diseases and insects

affecting forests. Instruction is given by Walter L. Howard, M. S., assistant professor of horticulture, and Ernest H. Favor, A. B., assistant in horticulture.

Montana College of Agriculture and Mechanic Arts.—Instruction in forestry is offered as an elective in the agricultural course, senior year, second semester, three hours per week. It includes the influence of forests on climate, soil, and flow of streams; characteristics and uses of typical woods; management and preservation of forests; special study of forest trees native to Montana. Instruction is given by Roy W. Fisher, B. S., assistant professor of horticulture.

University of Nebraska.—The undergraduate course in forestry extends through four years and leads to the B. S. degree. During the course opportunity is given to spend one or more summers in some of the Government forest reserves. The instruction in forestry is as follows:

First year: Introduction to forestry (one semester, two hours).

Second year: Study of woods (one semester, two hours).

Third year: Silviculture (three hours, and six hours' field work); timber physics (two hours); forest zoology (two hours).

Fourth year: Forest measurements and management (two hours, and four hours' field work); forest utilization (one semester, two hours); forest entomology (one semester, two hours); forest history and policy (one semester, two hours).

There are offered also a course in forestry for teachers of nature study (one semester, one hour, and field or laboratory work), and a course in farm forestry for students of agriculture (one semester, one hour, and field work). Instruction is given by Francis G. Miller, M. F., professor of forestry.

Nevada State University.—A course on elementary forestry may be elected by seniors in the agricultural course (one semester, four hours; one semester, three hours). Instruction is given by Patrick B. Kennedy, Ph. D., professor of botany and horticulture.

New Hampshire College of Agriculture and Mechanic Arts.—The instruction in forestry is as follows:

Arboriculture and forestry: Use of trees for shelter, shade, and ornament, and their propagation; value of trees for timber; improvement of existing woodlands; influence of forests upon soils, crops, and climate; establishment and management of plantations of forest trees. (For agricultural juniors, ten weeks, three exercises per week.)

Forest technology: Establishing, improving, and managing woodlands; estimating and measuring standing timber and harvesting forest products; physical properties of woods, forest botany, and entomology. (Elective for agricultural seniors, twelve weeks, three exercises per week.)

Forest economics: Climatic influences; soil and crop production; forest administration; forest laws; forest policies; forest distribution; forest utilization. (Elective for agricultural seniors, ten weeks, three exercises per week.) Instruction is given by Frank W. Rane, M. S., professor of horticulture and forestry.

New Mexico College of Agriculture and Mechanic Arts.—The study of windbreaks, home planting, utility of forest plantations, influence of forests on climate and water courses, forest reserves, and forest-tree planting. (Required of agricultural sophomores, twelve weeks, two hours.) Instruction is given by the department of agriculture and horticulture.

North Carolina College of Agriculture and Mechanic Arts.—Lectures on forest influences and methods of forest management, timbers, and forest products. (Elective for seniors in agriculture, ten weeks, three periods.)

North Dakota Agricultural College.—Lectures on the care and cultivation of groves and timber belts, study of the different species in North Dakota, influence

of forests upon atmospheric conditions and soil fertility. (Junior year of agricultural course, six weeks, five hours.) Instruction is given by C. B. Waldron, B. S., professor of horticulture and forestry.

Ohio State University.—The undergraduate course in horticulture and forestry extends through four years and leads to the B. S. degree. The instruction in forestry includes:

Third year: Forest botany (thirteen weeks, two hours; laboratory and field work, four hours); histology of wood (twelve weeks, two hours; laboratory, four hours); forest ecology and pathology (eleven weeks, two hours; laboratory, four hours).

Fourth year: Elements of forestry (thirteen weeks, two hours; laboratory or practicum, six hours); forest technology and timber physics (twelve weeks, two hours; laboratory or practicum, six hours); forest economics (eleven weeks, two hours; laboratory or practicum, six hours); thesis work (two hours per week through the year).

Instruction in dendrology is offered as follows: Lectures and field work (thirteen weeks, four hours); laboratory work and special investigation (twelve weeks, four hours). Instruction is given by William R. Lazenby, M. Agr., professor of horticulture and botany, and Vernon H. Davis, M. S. A., assistant professor of horticulture and forestry.

Oklahoma Agricultural and Mechanical College.—During ten weeks of the senior year of the agricultural course instruction is given (five hours per week) on conditions of forest growth, methods of reproduction, preservation, and harvesting, economics of forestry, forest belts, forest reserves, and national parks of the United States. Instruction is given by Oscar M. Morris, B. S., professor of horticulture.

Oregon Agricultural College.—Instruction in forestry is offered as an elective for seniors in the agricultural course as follows:

First term: Lectures, laboratory exercises, and field work on Pacific coast forests; forest areas, type trees, and products; forest trees, chief characteristics, uses, and identification. (Five hours a week.)

Second term: Lectures on forest culture, forest management, forest protection, forest laws. (Five hours a week.)

Third term: Lectures, laboratory exercises, and field work on plant diseases, especially those affecting forest trees; fungous foes of timber; timber preservation. (Seven hours a week.)

Fourth term: Construction of woods and metals. (Seven hours a week.) Instruction is given by Edward R. Lake, M. S., professor of botany and horticulture.

Pennsylvania State College.—Forestry is elective in the agricultural course and required in the course in biology during the second semester of the junior year, two hours per week. The instruction consists of lectures on the value of forests from climatic and economic considerations, with the best available methods for the conservation and replacement of them.

Rhode Island College of Agriculture and Mechanic Arts.—Lectures and supplementary reading on general importance of forests, their influence on climate and water supply, methods of regeneration, and systems of forest management. (Elective in junior year, ten weeks, three exercises per week.) Instruction is given by Fred W. Card, M. S., professor of agriculture.

South Dakota Agricultural College.—Principles of forestry, influence of forests on climate, timber planting on the prairies, European forestry methods as modified by prairie conditions, shelter belts, propagation, cultivation, characteristics, and uses of forest trees. (Eleven weeks, three hours a week.)

Forestry literature (thirteen weeks, five hours a week). Instruction is given by Niels E. Hansen, M. S., professor of horticulture and forestry.

University of Tennessee.—General principles of forest growth, identification of trees, estimating the forest crop, forest management, with special attention to hardwood growths. (Lectures, with practice in senior year of agricultural course, ten weeks, one period and three hours per week.) Instruction is given by Charles A. Keffer, professor of horticulture and forestry.

Agricultural and Mechanical College of Texas.—A brief study of the history of forestry, means of propagation and development, and of the effects of forests on climate. (Elective, junior year, eleven weeks, two hours a week.)

Agricultural College of Utah.—Study of trees under forest conditions; trees in relation to altitude, humidity, temperature, and winds; forest distribution in relation to soil and environment; methods of forestry propagation and management; wind-breaks, shelter belts, and forestry plantations; forest products; study of the trees and shrubs of Utah. (Elective in senior year, sixteen weeks, two hours a week.)

Virginia Agricultural and Mechanical College and Polytechnic Institute.—Preserving and improving original forests; classification and study of native trees, with notes on their economic importance; harvesting, etc.; starting forest plantations. (Required in agricultural and horticultural courses, junior year, seventeen weeks, three times a week.) Instruction given by M. Ferguson, Ph. D., adjunct professor of agricultural bacteriology and microscopy.

State College of Washington.—Planting and care of young forests and preservation of natural forests. (Elective, one semester, daily.) Instruction given by Walter S. Thornber, M. S., professor of horticulture.

University of Washington.—History and progress of forestry as a science. (Lectures, collateral reading, and field work, one semester, twice a week.) Edmond S. Meany, M. L., professor of history.

West Virginia University.—Protection of growing crops, reforestation, forest management, equable climate, future timber supply, etc. (Elective.) Thomas C. Johnson, A. M., instructor in botany.

In addition to the institutions mentioned above, instruction and practice in forestry have been given for some years at Biltmore, N. C., under the direction of the forester of the Vanderbilt estate at that place. There is not at hand any information as to the scope of the work or the amount of time required.

THE AMERICAN SYSTEM OF AGRICULTURAL EDUCATION AND RESEARCH.

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AGRICULTURAL EDUCATION.

INTRODUCTION.

The American system of agricultural education includes a number of different classes of institutions which, taken together, provide all grades of instruction in agriculture, from graduate courses leading to the doctor's degree to nature study courses in the primary schools and kindergartens. These institutions may be grouped under five general heads: (1) Departments of original research and graduate study in agriculture of university grade, including the National

Department of Agriculture and the State agricultural experiment stations; (2) colleges and schools giving general and special courses in agriculture; (3) secondary schools of agriculture (agricultural high schools); (4) primary schools incidentally giving elementary instruction in agriculture, and (5) agencies for university extension (farmers' institutes, correspondence courses, etc.). Secondary and primary instruction in agriculture is of comparatively recent development in the United States, but graduate and collegiate courses are well established and take rank with the best agricultural courses in the much older universities and colleges of Europe.

The American institutions for instruction and research in agriculture are brought together to constitute a national system through the Association of American Agricultural Colleges and Experiment Stations (organized in 1887), the Office of Experiment Stations of the United States Department of Agriculture, and the Bureau of Education of the Department of the Interior. The association has been very active and efficient in its efforts to promote agricultural education through committees especially appointed to consider the subject.[a] One of these committees has recommended, with the approval of the association, as a standard of entrance requirements for college courses, (1) physical geography; (2) United States history; (3) arithmetic, including the metric system; (4) algebra to quadratics; (5) English grammar and composition, together with the English requirements of the New England Association of Colleges and Preparatory Schools; and (6) ancient, general, or English history; and the committee has suggested that all colleges unite in requiring the first five subjects as a minimum for admission to their lowest collegiate classes.

The committee has also recommended that the following subjects be included in a four years' college course in agriculture leading to the bachelor's degree: Algebra, geometry, trigonometry, drawing, English, other modern languages, psychology, ethics or logic, political economy, general history, constitutional law, physics, chemistry (general and agricultural), meteorology, geology, botany (including vegetable physiology and pathology), zoology (including entomology), physiology, veterinary science, horticulture, forestry, and agriculture (in the narrow technical sense). The committee has divided technical agriculture into (1) agronomy (plant production); (2) zootechny (animal industry); (3) agrotechny (agricultural technology); (4) rural engineering (farm mechanics); and (5) rural economics (farm management).

HISTORICAL.

Organized efforts in behalf of agricultural education and research may be said to have had their beginnings in the United States in the agricultural societies which began to be formed near the end of the eighteenth century. These societies not only began the publication of information relating to agriculture themselves, but stimulated the publication of books and agricultural periodicals on the subject and encouraged the holding of agricultural fairs, which exerted a considerable educational influence. Even at this early period some effort was made to introduce agricultural instruction into the school system of the country, but without much success. In 1792, under the influence of the New York Agricultural Society, the trustees of Columbia College in New York City, established "a professorship for natural history, chemistry, and agriculture," and

[a] Since 1895 this association has had a standing committee on methods of teaching agriculture, of which the Director of the Office of Experiment Stations of the Department of Agriculture, Dr. A. C. True, is chairman. This committee has made nine reports on different phases of agricultural education, which have been published as Circulars Nos. 32, 37, 39, 41, 45, 49, 55, and 60, of the Office of Experiment Stations.

elected Dr. Samuel L. Mitchill, an active member of the society. to fill the chair. In 1801 the Massachusetts society started a subscription which resulted in the establishment of a professorship of natural history in Harvard College in 1804, and later in the establishment of a botanic garden. Among the first strictly agricultural schools to be established was what was known as the Gardiner Lyceum, established at Gardiner, Me., in 1821, and successfully maintained for several years. This school received an annual grant of $1,000 from the State legislature, and its object was to give mechanics and farmers "such a scientific education as would enable them to become skilled in their professions." In 1826 an agricultural school was established at Derby, Conn., and proved immediately successful. A number of other schools in which agriculture was taught were established, mainly by private enterprise, in Connecticut and New York, between 1825 and 1850. In 1846 John P. Norton was appointed professor of agricultural chemistry and vegetable and animal physiology at Yale College, his pupil and successor being Samuel W. Johnson, the well-known author and a leader in the movement for agricultural education and research. Associated with him as professor of agriculture has been William H. Brewer, also a pupil of Professor Norton, and identified with agricultural schools established in New York prior to 1860. In 1853 the New York legislature passed acts establishing a State agricultural college and an industrial school, to be known as the "People's College." These institutions, however, did not become firmly established, although Amos Brown, the president of the latter, was largely instrumental in securing national legislation favoring industrial education. Agricultural colleges which have grown to be permanent and strong institutions were opened in Michigan in 1857 and in Pennsylvania and Maryland in 1859.

The National Department of Agriculture, which has grown to be such an important factor in agricultural education and research, began as a division of the Patent Office, its chief function being the collection and distribution of valuable seeds and plants. Congressional aid for this purpose began with an annual appropriation of $1,000 in 1838. This was increased to $35,000 in 1855, and in 1862 the Department of Agriculture was formally organized, its duties being defined to be "to acquire and diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants." Since its organization, however, the functions of the Department have been constantly enlarged by succeeding acts of Congress, until they now include almost every phase of agricultural research, and a wide range of educational work. The year in which the National Department of Agriculture was established also marks the passage of the first Morrill Act "donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts." This act provided for "the endowment, support, and maintenance of at least one college [in each State] where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and mechanic arts * * * in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." For these purposes there were granted to the several States 30,000 acres of land for each Member of Congress, the entire proceeds of the sale of which was to constitute a perpetual fund yielding not less than 5 per cent interest. The total fund received by the colleges established under this act is over $10,000,000.

While meetings of farmers, similar in character to the modern farmers' *Institute had been held prior* to that time, the institutes began to take distinc-

tive form as efficient educational agencies and to receive State aid about the time of the organization of the agricultural colleges under the Morrill Act of 1862.

In 1887 a new impetus was given to the development of instruction in agriculture in the land-grant colleges by the act of Congress known as the Hatch Act, giving each State and Territory $15,000 for the establishment and maintenance of an agricultural experiment station. In 1890 Congress further aided these institutions by the passage of what is known as the second Morrill Act for "the more complete endowment and maintenance of colleges for the benefit of agriculture and the mechanic arts." This act provided an immediate appropriation of $15,000 to each State and Territory, an increase of $1,000 each year for ten years, and thereafter $25,000 annually "to be applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science." Provision is made for separate institutions for white and colored students in States which may desire to make such an arrangement. Fifteen States have taken advantage of this provision. These supplementary acts, as well as the aid given by State legislatures, furnish an income of over $10,000,000 annually, and have been of great advantage to agricultural education in the country. Educational institutions receiving the benefits of the acts of Congress of July 2, 1862, and August 30, 1890, are now in operation in all the States and Territories except Alaska, Hawaii, and Porto Rico. The total number of these institutions is 66, of which 63 maintain courses in agriculture (see p. 248). Agricultural experiment stations are now in operation in every State and Territory of the United States, including Alaska, Hawaii, Porto Rico, and the Philippine Islands.

DEPARTMENTS OF ORIGINAL RESEARCH AND GRADUATE STUDY IN AGRICULTURE.

The Department of Agriculture and the experiment stations.—At the head of the system of agricultural education, as well as of research, stand the United States Department of Agriculture and the agricultural experiment stations in the different States and Territories (see p. 254), the latter organized chiefly as departments of the land-grant colleges. These constitute very largely the university or graduate branch of agricultural education in this country, having for their chief functions the discovery and dissemination of new truths regarding the theory and practice of agriculture. Organized primarily with reference to research, both the Department and the stations to a considerable extent directly promote agricultural education, in the technical sense, by giving instruction to students. This is done by opening their laboratories to assistants who participate in research work while continuing their studies.

While the other bureaus of the Department do valuable educational work along the lines of research in which they are engaged, the Office of Experiment Stations is the general agency of the Department for the promotion of agricultural education throughout the United States, and is steadily enlarging the scope and extent of this branch of its work. Special attention is being given to the better organization of the American system of agricultural education, so that it may include properly graded courses of instruction, reaching from the graduate school and the college to the common school, and may embrace all the branches of agriculture considered as both a science and an art. Part of this work is being done, as already explained, in cooperation with the Association of American Agricultural Colleges and Experiment Stations.

The Office of Experiment Stations has published a number of documents describing the history and present development of the American system of agricultural education and research, lists of text-books, and works of reference

on agricultural subjects, etc. It also gives a résumé of the progress of agricultural education in its annual report from year to year. These publications, as well as numerous others issued by the United States Department of Agriculture, are freely sent on application to teachers and school officers.

Several of the colleges of agriculture maintain regularly constituted graduate schools, and not a few others make arrangements whereby graduate students are enabled to pursue advanced courses leading to degrees. There are now 40 colleges which thus provide agricultural work leading to the master's degree and 9 which offer courses in agriculture leading to the doctor's degree.

In the summer of 1902 a graduate school of agriculture was successfully conducted at the Ohio State University. The plan for this school was originated by Prof. Thomas F. Hunt, dean of the College of Agriculture and Domestic Science of the Ohio State University, the purpose being to establish a course for advanced students in agriculture at which the leading teachers and investigators of the leading colleges and experiment stations and this Department should present summaries of the recent progress in agricultural science, illustrate improved methods of teaching agricultural subjects, and afford a somewhat extended opportunity for the discussion of live topics drawn from the rapidly advancing science of agriculture. The board of trustees of the university made provision for its financial support. The dean of the school was the author of this paper, and the faculty included 35 men, of whom 26 were professors in agricultural colleges, 7 were leading officers of the Department of Agriculture, and 2 were officers of the New York State Experiment Station. Seventy-five students were in attendance, representing 28 States and Territories. The courses of study included agronomy, zootechny, dairying, and breeding of plants and animals. Up to this time (1904) no single college has found it practicable to assume the financial responsibility of conducting such an enterprise, but the Association of American Agricultural Colleges and Experiment Stations has taken up the matter and appointed a committee to devise means for reopening the school and making it a permanent feature of our system of agricultural education.

THE AGRICULTURAL COLLEGES.

The colleges of agriculture may be divided into three classes, determined by differences in their organization: (1) Colleges offering only agricultural courses; (2) colleges offering additional courses, especially those in mechanic arts; and (3) colleges of agriculture connected with universities.

The only purely agricultural college in the United States is that in Massachusetts. Agricultural and mechanical colleges are maintained in Alabama, Colorado, Connecticut, Delaware, Iowa, Kansas, Kentucky, Maryland, Michigan, Mississippi, Montana, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, and Washington. Separate institutions of this class for colored students (including departments of universities located apart from the other colleges of those universities) are maintained in Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Texas, Virginia, and West Virginia. In all of these institutions except that in Arkansas courses in agriculture are conducted, but for the most part the instruction is confined to courses below the college grade. Similar institutions, maintained by State and private funds, are the well-known Hampton Normal and Agricultural Institute, in Virginia, and the Tuskegee Normal and Industrial Institute, in Alabama.

Colleges of agriculture (or equivalent schools or departments) in universities, are maintained, with the aid of national funds, in Arizona, Arkansas, California, Florida, Georgia, Idaho, Illinois, Indiana, Louisiana, Maine, Minnesota, Missouri, Nebraska, Nevada, New York, Ohio, Tennessee, Vermont, West Virginia, Wisconsin, and Wyoming. In Massachusetts, Harvard University has a school of agriculture called the Bussey Institution.

The aggregate value of the permanent funds and equipment of the land-grant colleges and of the universities having departments of agriculture in 1903 is estimated to be as follows: Land-grant fund of 1862, $11,140,890.51; other land-grant funds, $2,849,293.49; other permanent funds, $14,926,747.49; land grant of 1862 still unsold, $4,292,460.26; farms and grounds owned by the institutions, $5,610,441.03; buildings, $21,246,159.88; apparatus, $2,379,742.28; machinery, $1,112,805.28; libraries, $2,114,802.60; live stock, $252,490.66; miscellaneous equipment, $3,852,629.77; total, $69,778,463.25. The income of these institutions in 1903, exclusive of the funds received from the United States for agricultural experiment stations ($719,999.50), was as follows: Interest on land grant of 1862, $674,174.77; interest on other land grants, $84,903.31; United States appropriation under act of 1890, $1,200,000; interest on endowment or regular appropriation, $278,409.25; State appropriation for current expenses, $2,469,848.44; State appropriation for buildings or other special purposes, $1,577,927.40; endowment, other than Federal or State grants, $602,802.41; tuition fees, $944,826.07; incidental fees, $294,492.95; miscellaneous, $1,120,993.80; total, $9,248,378.40. The value of the additions to the permanent endowment and equipment of these institutions in 1903 is estimated as follows: Permanent endowment, $626,916.56; buildings, $1,426,330.31; libraries, $135,312.46; apparatus, $104,247.94; machinery, $169,182.24; live stock, $51,140.96; miscellaneous, $230,552.91; total, $2,743,683.38.

The number of persons in the faculties of the colleges of agriculture and mechanic arts was as follows: For preparatory classes, 445; for collegiate and special classes, 2,024; total (deducting 8 counted twice), 2,461. In the other departments the faculties aggregated 1,141, making a grand total of 3,602 persons in the faculties of the land-grant institutions. The students in 1903 were as follows: (1) By classes—preparatory, 8,801; collegiate, 19,161; short course or special, 7,999; post-graduate, 607; other departments, 16,760; total (counting none twice), 52,489. (2) By courses: Four-year—agriculture, 3,146; horticulture, 539; household economy, 873; mechanical engineering, 4,475; civil engineering, 2,587; electrical engineering, 2,116; mining engineering, 955; chemical engineering, 188; architecture, 182. Shorter—agriculture, 5,505; dairying, 867; horticulture, 367; veterinary science, 811; military tactics, 16,316. The graduates in 1903 were 4,524, and since the organization of these institutions, 53,252. The average age of graduates in 1903 was 21 years and 10 months. The total number of volumes in the libraries was 1,837,461. The total number of acres of land granted to the States under the act of 1862 was 10,170,851, of which 1,007,994 are still unsold.

College courses in agriculture.—In nearly all of these institutions the college course in agriculture extends over four or more years. In cases where more than four years are required an additional year or two years have been added to prepare students for admission to the regular course. The course varies considerably in different institutions as regards the requirements both for admission and for graduation. In some cases students are admitted directly from the common schools, while in others the entrance requirements are on a level with those for admission to other college courses in high-grade colleges. Gradually, however, a number of the institutions which formerly admitted students from the common schools are raising their entrance requirements to

correspond more nearly with the recommendations of the committee on entrance requirements of the Association of American Agricultural Colleges and Experiment Stations.

The course at the Massachusetts Agricultural College may be considered typical of relatively high-grade college courses in agriculture as given in American colleges. Candidates for admission must be at least 16 years old, and are required to pass examinations in English, general history, physiology, physical geography, algebra (through quadratics), plane geometry, and civil government. The student is required to follow a definitely prescribed curriculum during two years, after which he is allowed to elect one of the following courses: Agriculture, horticulture, biology, chemistry, mathematics, and landscape gardening. In freshman year the following subjects are included in the course: Agriculture, botany, chemistry, algebra, geometry, trigonometry, English, French, military tactics, and history; in sophomore year, agriculture, horticulture, zoology, chemistry, English, and German; in junior year the student follows one of the prescribed courses mentioned above; and in senior year, together with the required military science, bacteriology, and Constitution of the United States, he must take at least three elective studies closely correlated with his junior-year course, which may be selected from the following: Agriculture, botany, horticulture, landscape gardening, chemistry, physics, entomology, veterinary science, engineering, English, French, German, Latin.

A similar arrangement prevails at the Michigan Agricultural College, where the agricultural students, after pursuing the prescribed course for two years, are allowed to elect between agriculture, horticulture, and forestry.

Iowa State College now offers four full-year courses in agriculture, in which the student is allowed to specialize in agronomy, dairying, animal husbandry, or horticulture.

The elective system prevails in several of the agricultural colleges, especially in those connected with universities. The college of agriculture of the University of Illinois, for example, offers about sixty electives in the different branches of the subject of agriculture, and Cornell University has 8 groups of electives from which students may choose during the last two years in the regular college course. Another notable tendency of these larger institutions is the growing disposition to divide the subject of agriculture into specialties, such as plant industry (including agronomy, horticulture, and forestry), animal industry, agrotechny (dairying, sugar making, etc.), rural engineering, and rural economy. This specialization has resulted in the organization of agricultural faculties with professors of agronomy, horticulture, animal industry, etc., instead of, as in former years, one professor charged with teaching the whole subject of agriculture, and also, not infrequently, such related subjects as agricultural chemistry, botany, and veterinary science.

In the effort to meet the needs of the various classes of students, especially of those who are unable to complete a full college course, the agricultural colleges have been unusually active in recent years in organizing short and special courses of different kinds. Forty-four of these institutions have organized such courses, which are planned to meet the needs of young people who may be classified somewhat roughly as follows: (1) Those preparing to enter a four-year agricultural course; (2) those desiring instruction in agricultural subjects, but having insufficient scholastic attainments to take the full collegiate course; (3) those unable to leave home for an extended course, who desire instruction in some particular phase of agricultural science or wish to become proficient in some branch of agricultural practice, and (4) teachers desiring to prepare themselves to give instruction in nature study and elementary agriculture. *For the first two classes* courses from one to three years in length are

provided; for the third, from a week or ten days to ten or twelve weeks in length; and for the fourth, summer schools and one-year to two-year normal courses. At least 6 of the agricultural colleges—viz, those of Maine, Minnesota, Nebraska, Oklahoma, Rhode Island, and Washington—maintain, in addition to their regular courses, agricultural courses of high-school grade.

Much greater attention than formerly is being given to the improvement of methods of teaching agricultural subjects. This is evidenced by the employment of more thoroughly trained teachers, by individual and associated efforts to define and arrange the topics of instruction in accordance with pedagogical principles, by the general adoption of the laboratory system as applied to the field, the plant house, and the barn, as well as to the buildings constructed with special reference to the peculiar needs of instruction in agricultural subjects.

The collection and devising of apparatus and illustrative material are being pushed with much enthusiasm and success, and the general housing and equipment of the agricultural departments are being greatly extended and improved.

AGRICULTURAL INSTRUCTION IN SECONDARY AND PRIMARY SCHOOLS.

Besides the high school agricultural courses and schools of agriculture mentioned above as maintained in connection with colleges of agriculture, there are a considerable number of secondary agricultural schools, some of which are supported by State or local funds and some by private funds.

Alabama has nine agricultural schools, one in each Congressional district, supported by State and local funds. These are located at Abbeville, Albertville, Athens, Blountsville, Evergreen, Hamilton, Jackson, Sylacauga, and Wetumpka. Usually these schools are connected with local public schools and resident pupils predominate, but there are also quite a number of pupils enrolled from the towns adjoining each school.

The California Polytechnic School, located at San Luis Obispo, and opened October 1, 1903, is a State institution established "to furnish to young people of both sexes mental and manual training in the arts and sciences, including agriculture, mechanics, engineering, business methods, domestic economy, and such other branches as will fit the students for the nonprofessional walks of life."

An agricultural school of secondary grade has recently been opened at Rutherford, Napa County, Cal., under the auspices of the Youths' Directory of San Francisco, a Roman Catholic organization.

In Connecticut there is a school of horticulture located just outside the city limits of Hartford and supported by private funds. The school is maintained primarily for the purpose of affording instruction in horticulture and gardening to the pupils of the public schools of Hartford.

The Winona Agricultural and Technical Institute, at Winona Lake, Ind., founded in 1902, is a secondary school, having a two-year preparatory department corresponding to the seventh and eighth grades of the public schools, and a four-year academic department providing four groups of studies entitled agriculture, trades, elementary technology, and academic.

In Massachusetts an agricultural department has been established in connection with the Mount Hermon School, near Northfield, founded by the late D. L. Moody. This State also includes a number of institutions offering courses in horticulture for women. At Groton there is the School of Horticulture and Landscape Gardening for women, conducted under private auspices. Simmons College, Boston, now provides a course in theoretical and practical horticulture for women. Wellesley College also announces a course in elementary horti-

culture and landscape gardening, to include lectures on the preparation of soils, the propagation, cultivation, and pruning of plants, school gardens, and planting designs.

In Missouri the three State normal schools, located at Cape Girardeau, Kirksville, and Warrensburg, give instruction in agriculture for the purpose of preparing teachers to introduce this subject into the public schools of the State.

The Baron de Hirsch Agricultural and Industrial School, at Woodbine, N. J., regularly opened for students in 1894. provides general and agricultural education of the secondary grade, combined with a large amount of practical farming and horticulture, for a limited number of boys and girls.

In Elyria, Ohio, a city of about 10,000 inhabitants, an agricultural college graduate is employed to teach agriculture and chemistry in the public high school, and an elective course has been arranged in which agriculture is taught n the third and fourth years.

A four-year course in agriculture is offered at Union Academy, Belleville, N. Y.

The National Farm School, located at Doylestown, Pa., was established in 1896, and provides secondary instruction in agriculture, with practical farm work for about 40 boys. The school is supported by a small State appropriation, private donations, fees, and sales of farm products.

Wisconsin has two county agricultural schools established under the provisions of a State law granting aid not to exceed $2,500 per annum to the two counties which first erect buildings and provide other necessary equipment for such schools. These are the Marathon County School of Agriculture and Domestic Economy, located at Wausau, and opened October 6, 1902, and the Dunn County School of Agriculture and Domestic Science, located at Menomonie, opened October 20, 1902.

In the Girls' Industrial College at Denton, Tex., opened to students in September, 1903, considerable attention is given to the teaching of horticulture and ornamental gardening, floriculture, dairying, bee keeping, and poultry keeping.

A few schools of primary and grammar grades have attempted, with apparent success, to give instruction in the elements of agriculture. The Watkinson Farm School, near Hartford, Conn., and the Thompsons Island Farm School, in Boston Harbor, are examples of such institutions. Near Knoxville, Tenn., plans have been made and land purchased for the establishment of a central rural school in which the pupils will receive instruction not only in the usual subjects taught in such a school, but also in agricultural subjects, such as planting and cultivating fruits and flowers, raising poultry, and operating dairies. In Missouri and portions of Illinois numerous successful experiments along these lines have been made in the rural schools, while in other States the public schools of both urban and rural districts have made encouraging progress in the introduction of nature study and school-garden work. These subjects now constitute a part of the regular instruction and practice work in many of the normal schools in all parts of the Union.

A number of the State legislatures have passed laws recently whereby the public schools are permitted or encouraged to provide instruction in agriculture. Such laws now exist in Alabama, Georgia, Illinois, Louisiana, Maryland, Michigan, Missouri, North Carolina, and Wisconsin. The State superintendents of public instruction are beginning to take an active interest in this subject, and at the last meeting of the National Educational Association in Boston a committee was appointed to consider, among other things, the teaching of agricultural subjects in the public schools. The agricultural work which is now being attempted in the public schools in different parts of the country includes the

following: (1) Nature study with plants, farm crops, domestic animals, soils, etc.; (2) school-garden work, including the growing of flowers, vines, and shrubbery for the improvement of school and home grounds and vegetables in gardens at the schools or at home; (3) the organization of clubs among rural school children for making simple experiments with fertilizers and field crops, and (4) lecture courses and institutes for rural school children.

UNIVERSITY EXTENSION IN AGRICULTURE.

Probably no university-extension movement in this country has actually been so widespread as that on behalf of agriculture. Excluding the dissemination of agricultural information through the publications of the experiment stations and the Department of Agriculture, which might, however, be very properly included, we find many of the colleges now extending their educational influences over wide areas and among many hundreds of people not enrolled in their regular courses through the agency of farmers' institutes, reading courses for farmers and farmers' wives, correspondence courses, agricultural experimental unions, and the introduction of nature study and school-garden work with children. The farmers' institutes, which are now held in 46 States and Territories, are attended by over 900,000 people. To aid in making these institutes more effective for the dissemination of the results of agricultural investigation and of improved methods of agricultural practice, the National Department of Agriculture has, under Congressional authority, appointed in the Office of Experiment Stations a farmers' institute specialist and authorized him to investigate and report on the organization and progress of farmers' institutes in the several States and Territories.

A number of the colleges maintain reading courses for farmers, in which certain lines of reading are regularly taken up, review questions are sent out, and the answers received are criticised. Some of the colleges modify this procedure by preparing special publications for the members of its reading courses to study. Reading courses are now conducted under the auspices of the agricultural colleges in Michigan, New York, South Dakota, and West Virginia. Closely related to the reading courses are the correspondence courses conducted by the Pennsylvania State College, which enrolls several hundred correspondents who regularly receive mimeograph copies of lessons prepared under the direction of the professor of agriculture in the college, and similar courses in agriculture and horticulture now offered by the University of Wyoming. The success of extension work of this kind has led to the establishment recently of three quite strong correspondence schools under private auspices, two of which offer courses in agriculture, and the other courses in poultry culture.

Experimental unions, which are organizations of college graduates and nongraduate students for the purpose of extending the influence of the colleges and experiment stations by means of cooperative experiments with field crops, methods of culture, fertilizers, etc., are now organized in Illinois, Iowa, Nebraska, New York, Ohio, Wisconsin, and possibly one or two other States.

Several of the agricultural colleges are further extending their influence through the preparation of nature-study leaflets and school-garden leaflets, and through lectures and correspondence on the part of their officers to promote a better understanding of the elements which make up the environment of children in rural sections, the aim being, first, to put children into better sympathy with their surroundings, and, secondly, to prepare the way for instruction in the elements of agriculture in the rural schools.

AGRICULTURAL RESEARCH.

The United States has in its National Department of Agriculture and the State agricultural experiment stations a very complete system of agricultural research, and the results obtained through these agencies are having a powerful influence in improving the agriculture of the country.

THE UNITED STATES DEPARTMENT OF AGRICULTURE.

The largest single agency for agricultural research in the United States is the National Department of Agriculture. This Department, as already stated, began its existence as a division of the Patent Office, the chief function of which was the collection and distribution of valuable seeds and plants and the collection and compilation of agricultural statistics of various kinds. At present (1904) it employs over 4,000 persons and expends nearly $6,000,000 annually in the promotion of agriculture. This it seeks to do largely through scientific investigation and the widest possible dissemination of the results of its work. From the very beginning of its existence the Department has been engaged in the investigation of scientific questions related to agriculture, and at the present time a very large proportion of its force consists of scientific experts and specialists, who are devoting their time almost exclusively to investigation of this character.

In its Weather Bureau, and Bureaus of Animal Industry, Plant Industry, Soils, Chemistry, Forestry, Entomology, and Statistics, Office of Experiment Stations (having charge of nutrition and irrigation and drainage investigations), Biological Survey, Office of Road Inquiries, and agricultural library of 85,000 volumes, the Department has the most ample equipment for the study of practically all scientific problems related to agricultural production and distribution. In fact, the Department is primarily a great research institution provided with well-equipped laboratories and other facilities for research in all branches of science which have a direct bearing on agriculture.

The magnitude of the effort which the Department is making to disseminate the results of its work is shown in the fact that during the year ended June 30, 1904, there were issued through the Division of Publications of the Department 972 documents, the total distribution of which was over 12,000,000 copies.

The Department maintains close relations with the agricultural colleges and experiment stations through its Office of Experiment Stations, and there is an evident disposition on the part of Congress to promote such relations by providing in its appropriation acts for a large amount of cooperation with the State institutions. This plan of cooperation, which is being strengthened from year to year, serves to unify the work and to build up a system of agricultural research which comprehends the nation as a whole and yet meets the varied needs and conditions of an extremely diversified agriculture.

THE AGRICULTURAL EXPERIMENT STATIONS.

The agricultural experiment stations in the United States are State institutions, supported in part by funds given by the National Government to the States to be used for their maintenance. The direct management of the stations is wholly in the hands of State officers, but they sustain certain definite relations to the Federal Government, and the Congressional appropriations for their support are included in the annual appropriation acts for the United States Department of Agriculture.

The stations thus have much more intimate relations with the Department of Agriculture than with any other branch of the Federal Government. The

act of Congress (Hatch Act) of March 2, 1887, under which the stations have been organized, provides "that in order to secure, as far as practicable, uniformity of methods and results in the work of said stations it shall be the duty of the United States Commissioner [now Secretary] of Agriculture to furnish forms, as far as practicable, for the tabulation of results of investigations or experiments; to indicate from time to time such lines of inquiry as to him shall seem most important, and in general to furnish such advice and assistance as will best promote the purposes of this act."

Beginning with the year 1894, Congress has each year inserted in the appropriation act for the maintenance of the stations a provision that "the Secretary of Agriculture shall prescribe the form of the annual financial statement [required by the Hatch Act], shall ascertain whether the expenditures under the appropriation hereby made are in accordance with the provisions of said act, and shall report thereon to Congress." Thus, virtually, the Secretary of Agriculture now has general supervision of the expenditures of the stations under the Hatch Act. The Office of Experiment Stations, organized in 1888, represents the Department of Agriculture in its relations with the stations.

The stations are by law departments of the land-grant colleges. However, the act establishing the stations made an exception in favor of State agricultural experiment stations which had been established separate from the land-grant colleges prior to the passage of the act (March 2, 1887). In this way it has come about that State stations are maintained in Connecticut, Louisiana, New York, and Ohio which are not connected with colleges and yet receive, in whole or in part, the benefits of the Hatch Act. In New Jersey there is a station which is supported by State funds as distinct from the station which received the Hatch funds, but both stations are located at the land-grant college and have the same director. There are also stations maintained wholly by State and local funds in Alabama, Hawaii, and Missouri, and in a number of States substations are maintained. Excluding the substations, the total number of stations in the United States is 60, of which 55 receive appropriations provided for by acts of Congress.

Officers and employees.—The stations which are departments of the colleges are, as a rule, under the general management of the governing boards of these institutions. The separate State stations have their own governing boards. The station staff usually consists of a director and several scientific experts in charge of special lines of work. In a few instances the president of the college is also director of the station connected with it, but in a far greater number of instances the director is a separate officer responsible to the president. In 1903 there were 757 station officers in the work of administration and inquiry. The number of officers engaged in the different lines of work was as follows: Directors, 54; assistant and vice directors, 19; special agents in charge, 3; chemists, 160; agriculturists, 54; agronomists, 27; animal husbandmen, 39; poultrymen, 7; horticulturists, 79; farm and garden foremen, 39; dairymen, 34; botanists, 56; plant pathologists, 4; entomologists, 50; zoologists, 6; veterinarians, 31; meteorologists, 10; biologists, 6; physicists, 6; geologists, 4; mycologists and bacteriologists, 23; irrigation engineers, 11; in charge of substations, 16; secretaries and treasurers, 27; librarians, 12; clerks and stenographers, 34. There are also 50 persons classified under the head of "miscellaneous," including superintendents of grounds and buildings, apiarists, herdsmen, and other employees.

Income in 1903.—The total income of the stations during 1903 was $1,427,237.73, of which $720,000 was received from the the National Government, and the remainder, $707,237.73, from State governments, individuals, and communities, fees for analyses of fertilizers, sales of farm products, and mis-

cellaneous sources. In addition to this the Office of Experiment Stations had an appropriation of $161,000 for the past fiscal year, including $15,000 for the Alaska Experiment Stations, $12,000 for the Hawaii Experiment Station, $12,000 for the Porto Rico Experiment Station, $20,000 for nutrition investigations, and $65,000 for irrigation investigations. The total value of additions to the equipment of the stations in 1903 is estimated to be $236,370.61.

Equipment.—The stations are as a rule already well equipped as regards offices, laboratories, vegetation houses, barns and other farm buildings, etc., and scientific appliances, or are rapidly acquiring improved facilities of this character either through direct State appropriations or through the land-grant colleges with which they are connected. In this respect especially have the stations profited by their association with the colleges.

Lines of work of the stations.—The stations are conducting a wide range of scientific research in laboratory and plant houses and an equally large amount of practical work in field, orchard, stable, and dairy. Their investigations include studies of climatic and weather conditions as related to plant growth; soil investigations and fertilizer experiments to find the best means of maintaining and increasing the productiveness of the soil; irrigation and drainage experiments to increase the area of productive lands; breeding and culture of plants to increase the yield and improve the quality of farm, garden, orchard, and greenhouse crops of all kinds; breeding and feeding of farm animals to increase production and improve the quality of meat, milk, and wool; dairying to improve the output of butter and cheese; inspection of fertilizers, foods, and feeding stuffs, dairy products, etc., to protect farmers against fraud, and a large number of associated lines of work which it is not necessary to enumerate here. These various lines of investigation may be classified as follows: (1) Original investigations to discover new facts of value to agriculture; (2) experiments to demonstrate the scientific and practical value of facts already known and their applicability to special conditions; (3) studies of natural agricultural conditions, resources, and possibilities, and (4) inspection and control work to protect the farmer against fraud. Investigations of the stations are included primarily to supply information which it is impossible for each individual farmer to search out for himself, and the controlling purpose of their work has been (1) to develop the agricultural resources and promote the farming interests of the particular regions in which they are located, and (2) to advance the cause of scientific agriculture at large. The operations of the individual station are likely to be of a mixed character, including more or less of each of the general classes of work named, but varying in the prominence given to any particular class as the local and regional conditions and needs of the State or Territory in which it is located demand.

THE PROGRESS OF EDUCATIONAL REFORM IN CHINA.

[The following report was prepared by Mr. E. T. Williams, Chinese secretary of the American legation at Peking, at the request of Hon. W. W. Rockhill, the American minister at that capital, and was received by this Bureau from the State Department. It traces the history of the school-reform movement in China, and indicates what phase it has assumed at the present time. Mr. Williams's remarks as to the position and prospects of the American mission schools, under the new order of things, possess a peculiar interest for our people.]

DECEMBER 22, 1905.

Hon. W. W. ROCKHILL,

American Minister, Peking, China.

SIR: I have the honor to submit the following report upon recent educational *reforms in China.*

By Article II of the final protocol of 1901 it was provided that all official examinations should be suspended for a period of five years in those cities where foreigners had been massacred or subjected to cruel treatment during the "Boxer" uprising of 1900. In accordance with this provision an imperial edict was issued on August 19, 1901, suspending for five years all civil and military examinations in 46 cities.

This action opened the way for the favorable consideration by the Chinese Government of a much-needed reform of the whole educational system of the Empire.

Previous to the "Boxer" trouble the Imperial Government had taken only an indirect interest in the education of Chinese youth. It contented itself with maintaining a system of examinations by which the brightest students were drafted into the civil service. This system, which apparently had its origin in the twelfth century B. C., was gradually developed through the long course of its history into an institution which was the pride of the Empire and the hope of its students, since by it the highest offices in the State and their rich emoluments became the prizes of scholarship. The method was not bad, provided the examination had had any bearing whatever upon the duties to be performed in the civil service. But, as the candidates were tested in their ability to expound the sacred books of China and to write beautiful odes and brilliant essays, proficiency in these matters became the one aim of master and pupil alike, and was esteemed of more importance than any practical acquaintance with affairs or any knowledge of the science of government. Such a system was more apt to secure pedantry than statesmanship. But, if the examination had been of a more practical character, the studies of the candidates would of necessity have been of a more useful kind also. Attempts were made indeed at various times to introduce into the examinations questions of present day interest, but the attempts were local and spasmodic and, being contrary to established custom in a land where precedent has all the force of law, the students rebelled and the examiners yielded to pressure.

The advent of the foreigner, however, has gradually wrought a great change. Missionaries established schools wherever they went. This is particularly true of the American missionaries. Girls and boys, chiefly of the middle and lower classes, were taught to read and write their own language and were given a knowledge of the elements of mathematics, geography, history, and of the natural sciences. In the most important cities academies or colleges were founded, and their brightest students were, many of them, sent abroad to complete their education.

With a few exceptions, however, the mandarins of China looked askance at these educational efforts of the foreigners. They felt sure that there must be some ulterior motive, and believed that the missionary was a political emissary, preparing the way for foreign encroachments. The mission schools have, therefore, never been regarded with much favor by the official classes, and the graduates from them have found little, if any, chance for official employment except as teachers, interpreters, or clerks, and until within three or four years scarcely one of them has ever secured any post of importance.

But foreign commerce steadily expanded, political relations became of increasing importance, and these changing conditions produced a constantly growing demand for a knowledge of foreign languages, of western industrial methods, international law, and an acquaintance with history and the sciences, whose comprehension is necessary to an understanding of western civilization. Mission schools, therefore, grew in numbers and importance from year to year, and the more enlightened officials, recognizing that "time makes ancient *good uncouth*," saw that China must change, and that without the learning

which the West could give her, she could not even maintain her prestige in Asia, much less hold her own among the great nations of the world. Several viceroys established colleges for the teaching of modern sciences. But these colleges had no relation to each other; there was no uniformity in the courses of study pursued; there were no elementary schools to prepare students for admission to them; and inasmuch as the old system of examinations still supplied the only entrance to an official career, the new schools seemed to lead nowither, and students were induced to attend chiefly by the payment of a monthly stipend. This attempt to establish a school system from the top was much like the Chinese method of building a house, the roof being put on before the walls are built up, except that the roof has the support of pillars resting on stone bases, while the school system was suspended in mid-air. The students, therefore, who really desired an education to fit them for a commercial career still continued, as a rule, to attend the mission schools. The military and naval schools established by various viceroys were also independent one of another, the methods of drill were unlike, the equipment different, the words of command in various languages, and the incipient armies and navies which began to be organized were formed upon different models.

Nevertheless these Government schools served the purpose of diminishing to some extent the prejudice which still existed in the minds of most officials, and of increasing the number of those who recognized that there was valuable knowledge to be gained outside the Chinese classics. The war with Japan served to demonstrate still more conclusively that Chinese institutions were hopelessly antiquated—wholly unsuited to modern conditions. The young Emperor and his advisers, resolved on reform, planned a complete school system for the whole Empire. But with the rashness of inexperience they antagonized the strongest elements of the nation. High officials who had given their lives to the service of the State were relegated to private life, and the religious sensibilities of the people were shocked by the wholesale confiscation of temples for educational purposes. The coup d'état followed, which sent the Emperor's advisers to the execution ground or forced them to fly into exile. A strong reaction set in. There were many occurrences to justify antipathy to the foreigner, and all things foreign began to be tabooed. The "Boxer" uprising was but an expression of this feeling. It failed of its purpose, but the attempt made shook the State to its foundations, and the walls of conservatism fell with a crash. Since that time there has been an unwavering determination on the part of the Government to modernize all its institutions. The plans adopted may not be the best in every instance, but the purpose is there, and the result, as there is every reason to believe, can not but be gratifying in the highest degree to all friends of China.

Immediately after the signature of the final protocol, in September, 1901, the Government took steps to establish a general system of public schools on modern lines. On January 13, 1904, the chancellor of the Imperial University, Chang Po-hsi, and the viceroy of the Hu-kuang Provinces, Chang-Chih-tung, after many months of independent investigation and subsequent collaboration, submitted to the Throne a complete and detailed plan for a national system of public schools, beginning with the kindergarten and crowned by the Imperial University. These regulations were published in eight volumes, and were based upon those of Japan, which in their turn were derived from the United States. The regulations were approved by Their Imperial Majesties, and local authorities were directed to carry them into operation. At the same time a special commission on educational reforms was appointed, the principal mem-

bers being the two chancellors of the Imperial University, Chang Po-hsi (Chinese) and Jungch'ing (Mongol). The provincial authorities throughout the Empire took up the difficult task, but found themselves hampered from the start—first, by their own ignorance of the modern curriculum; secondly, by the lack of properly qualified teachers and superintendents, and, thirdly, by the want of suitable text-books. The teachers needed are being secured in part from the students in the mission schools, in part by the employment of a very few Europeans and Americans, but in much larger measure by appointment of Japanese instructors. But the preparation of native teachers is being hastened by the sending of large numbers of students abroad for education. This movement began in earnest as soon as educational reform was determined upon, and has been greatly accelerated in the past two or three years. These students are nearly all supported either by the Imperial Government or the various provincial authorities, and most of them have been sent to Japan. Those sent to Europe and America number at most but a few hundreds, but those in Japan are to be counted by the thousand. The influence of Japan, therefore, in the new schools is predominant. And this seems wise, for Japan is near at hand and her educational system is abreast of the times. Her schools are easily accessible, and her teachers can be brought to China at small expense and engaged at much smaller salaries than Europeans or Americans. Even more important, however, is the spiritual kinship of the two nations. The Japanese understand the Chinese. They have but recently passed through the great change to which China is now being subjected. They can study the situation from the Chinese point of view. Their own social, political, and religious institutions are similar to those of China. They can therefore enter into close sympathy with the Chinese, wear Chinese dress, live upon Chinese food, dwell in Chinese houses, adapt themselves easily and heartily to the Chinese environment, and avoid giving offense to Chinese prejudices. Their thorough understanding of the old and the new will enable them to graft the modern system upon the rootstock of the ancient without destroying the latter. The transformation will thus be natural and the continuity with the past preserved. All that is of value in the ancient institutions of China will be conserved, though they will be modified to meet the requirements of modern conditions.

The text-books needed are being supplied in part by translations or original works prepared by missionaries or by the various bureaus of translation which have been maintained by several of the provincial governments for some years past. These books are to be subjected to revision, however, and new works are being prepared under Government supervision.

A recent memorial submitted to the Throne by Yin Ming-shou, a member of the Hanlin Academy, complains that the results of the past four years' work are very small, but when all the difficulties are taken into consideration the measure of success must be regarded as quite satisfactory. The new school system has now been inaugurated in every Province of China proper, and bids fair to make rapid development in the near future.

So long, however, as the old system of examinations was retained, as it was, throughout the greater part of the Empire, and this door of hope to official preferment was kept open, a large number of the students adhered to the old course of study, and it became necessary, therefore, in the interest of the new system, to definitely abolish the old order. This was done on September 1, 1905, by an imperial edict. This measure had an excellent effect, as is shown already by the memorials which are pouring in from all parts of the Empire suggesting measures for raising school funds, methods of employing the disappointed graduates of the old school (who are too advanced in years to take up the new *order of things)*, and recommending improvements in the new system in order to

meet difficulties that have arisen. It is shown, too, in the rapidly increasing number of schools that are being established and in the enthusiasm with which the people are making contributions of money to assist the Government in its plans. The Peking Gazette makes frequent mention of such voluntary offerings, some individuals giving as much as 10,000 taels each, and the gentry in other neighborhoods combining to establish and support the additional schools needed. The experience of the past four years has shown the necessity for a better organization, and a number of memorials upon this subject have recently been submitted, which, while they differ in details of the plans proposed, all agree in recommending a national board of education to rank with the other departments of the Imperial Government. The most important of these memorials was that of Pao-hsi, a Manchu of the imperial clan, and superintendent of education for the Province of Shansi. He proposed the establishment of a national board of education, modeled on that of Japan, and inasmuch as the provincial chancellors under the old system and the imperial examiners were under the jurisdiction of the board of rites, which was in reality a department of public worship and education, he proposed that the board of rites be entirely abolished. He also proposed that the Hanlin Academy and the Imperial Academy of Learning be incorporated with the new board of education. Prince Ch'ing, on behalf of the commission on administrative reforms, reported favorably upon the recommendation that a board of education be established and favored also the proposal to incorporate with it the Imperial Academy of Learning, which action will give the new board handsome quarters adjoining the Confucian Temple. The Prince was not in favor, however, of abolishing the board of rites, nor of making the Hanlin Academy an appendage of the new board, though he advised that some changes be made in the character of that institution, which will make its members more useful. In accordance with the recommendations of Prince Ch'ing, an imperial edict appeared on December 6, 1905, establishing the new board of education. I inclose a translation of the same.[a] Jungch'ing, who has been made president of the board, is one of the chancellors of the Imperial University, and has until recently been also one of the presidents of the board of revenue. He is also a grand councilor and a member of the commission on administrative reform. He is a Mongol, a comparatively young man, of progressive ideas.

Other recommendations of these recent memorials are that education be made compulsory, and that parents be fined for not sending their children to school, and that the funds heretofore used in conducting the triennial examinations, amounting to from 20,000 taels to 50,000 taels[b] from each province every three years, be employed in aid of the new system, one half to be spent by the province concerned and the other half by the board. These recommendations are referred to the new board for consideration.

The school regulations, as now in force, provide that children between the ages of 3 and 7 years shall be sent to the kindergarten. At 7 years of age they must be sent to the second-grade primary, where a five-year course is taken, and thence to the first-grade primary for a four-year course. The hsien (county) authorities are required to provide these primary schools. Every hsien city and every department city, as well as every market town and every village of 100 families, is expected to maintain from one to three second-grade primary schools, and the cities and towns mentioned at least one first-grade primary. Where the villages are poor or children few the authorities are authorized to combine two or three villages in the support of one second-

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[a] See page 266.

[b] The Chinese tael is worth about $1.40.

grade primary, but not more than 400 families are allowed to one school. It is recognized that this will not supply school accommodations for all the children, and the authorities are urged to persuade the people to supplement the Government schools by others of their own establishment. The course of study in the primary grades comprises ethics, reading and explaining the Chinese classics, Chinese composition, arithmetic, history, geography, elementary science, and physical drill. Drawing is also taken in the first grade.

From the first-grade primary the pupils are advanced to the intermediate grade, where a five-year course is to be taken. Each prefecture is required to provide at least one intermediate school. The course embraces a further study of Chinese, foreign languages (Japanese, English, German, French, and Russian), mathematics, geography, history, and the natural sciences, and ethics, drawing, and physical drill, with courses in law and political economy, when possible to establish the same. The intermediate grade is not free, but the tuition fee is low. Pupils are told that they are not being prepared especially for the civil service, but for the ordinary avocations of life, and at the close of the intermediate course may, if they choose, enter one of the special industrial or professional schools.

From the intermediate grade students pass to the provincial academy, usually styled a college. Here a three-year course is taken, on the completion of which admission may be had to the imperial university, at Peking. The university course is divided into two sections, the lower covering a college course of three or four years, according to the course chosen, and the upper a real university course of five years.

The university embraces eight schools or departments: Classical, law, literary, medical, science, agriculture, engineering, and commercial. Students pay for tuition, but free scholarships may be won by competition.

In addition to the regular course as outlined above, there are shorter courses provided for those unable to attend the university.

(1) For children already over 12 years of age who can not attend the primary schools there are established industrial schools where trades are taught.

(2) For boys who have taken the second-grade primary course and do not want to go further there is provided a primary school of agriculture to prepare the peasant's sons to perform the work of the farm more intelligently.

(3) Pupils who have completed the primary courses may enter special schools of agriculture, engineering, or commerce, and thus prepare themselves for farming, engineering, or mercantile life.

(4) Pupils may, if they choose, pass from the intermediate schools to special schools of agriculture, engineering, or commerce of a higher grade than those mentioned in (3).

(5) Every hsien (county) or department city is expected to maintain a second-grade teachers' school, and every provincial capital a first-grade teachers' school. These are to assist in equipping the new schools with the needed teachers.

(6) Special schools of foreign languages to prepare men for translators and interpreters in the diplomatic and consular services and for employment in the Government translation bureaus. The course is five years in length.

(7) A special course of three years for those who have already won their doctor's degree at the recent examinations under the old system. This will serve to bring them more or less into line with the new order of things.

(8) Special schools of law and political science will be maintained in all the provinces for the especial benefit of those expectant officials who have already been placed on the civil list under the old examination system, but have not yet been appointed to office. There has for centuries past been a pro-

special college at each provincial capital for the preparation of young candidates for the duties of official life, but these colleges have really existed only in name; no course of study is provided, and no instructors have been employed. The buildings and grounds are generally very attractive, but are chiefly used as clubhouses for the mandarins and gentry. In response to a memorial of Wu Ting-fang last May it was decided to require all expectants to take a course of one and a half years in law and political science and to pass a satisfactory examination in the same before being assigned to duty. Instruction is to be given in lectures by graduates of foreign schools, who will be selected and assigned to this duty upon their return to China.

In this connection it is interesting to note that the viceroy of this province, Yüan Shih-k'ai, has issued an order to the effect that all expectants of this province must spend at least three months in Japan before they can receive a definite appointment to office.

(5) Other special schools established in the provinces are those of veterinary surgery, police training schools, and the industrial schools connected with the New York houses which are called for by the recent reform of the penal code. It is hoped that by giving the prisoners respectable trades the poverty of the lower classes will be reduced and thus one great incentive to crime removed.

It will be seen, therefore, that the system theoretically covers the whole field, but it must of necessity be many years before some of the provinces can approach to any realization of this ideal. It is impossible to obtain any statistics upon the subject, but a brief statement of what has been done in part in this province will enable one to understand in some measure the present condition of affairs.

The viceroy at Tientsin has been very active in the matter and has been very fortunate in securing the services of a trained educator for provincial superintendent. This is Dr. C. D. Tenney, an American, who has been in the service of the Chinese Government for many years, chiefly in the capacity of president of the Tientsin University. Under the direction of Doctor Tenney the viceroy has already established more than 3,000 schools of various grades in this province of Chihli. These are exclusive of the schools established in the Peking prefecture. In the old provincial capital, Pao-ting Fu, there are over 2,300 students in the various high schools and academies established there. Pupils in the primary schools are not counted, nor those in the police training school. Among the special schools included are those of law, veterinary surgery, and agriculture.

In the city of Peking there have been established by the local authorities, independently of the viceroy, over 40 schools of all grades—primary, intermediate, academies, and the university (which was established before the "Boxer" folly, but reorganized two years ago), together with special schools of law, foreign languages, police training, and a military school for the sons of nobles.

Probably no other province is abreast of Chihli in education, but very much has been done also in the viceroyalty of Chang Chih-tung (Hupeh and Hunan), in the province of Kiangsu, and Kuangtung. With regard to the second mentioned, there are over 40 Government schools in operation in the city of Nanking, and large numbers also in Shanghai, Soochow, and other cities of the province.

Shantung has at least 100 of the new schools already established, of which 20 are in the provincial capital, Chi-nan Fu.

As stated above, all the provinces of China proper have done something, but it has been very difficult for those far inland to secure qualified teachers. *Note, however, that* even in far-away Yunan it is reported by the viceroy that

a teachers' training school has been established at the provincial capital and two Japanese professors secured for it, who also teach the Japanese language.

Owing to this lack of teachers and the fact that few students are prepared to enter the academies or the university, classes in the courses outlined for the provincial academies and the university are for the present suspended, and the instructors are employed in teaching those branches required in the intermediate and the teachers' training schools.

In regard to the instruction given there are two or three points worthy of special notice. No foreign instructor is allowed to teach his own religious views. This is eminently proper, in view of the fact that the schools are supported by a Government which maintains its own religious establishment. All instruction is to be given in the Mandarin dialect, a most commendable regulation, which in a generation, if carried out, will do much toward removing one of the principal obstacles to national solidarity. In all the coast provinces from Shanghai to the Tonkin border nearly every little district (county) has its own dialect, and these differ so much one from another that natives of the same province can not communicate with each other unless they can do so in writing. Although the curriculum provides for instruction in ethics in all the schools, the regulations call attention to the inadequacy of such instruction (so the ministers of education think) as given in foreign schools. This remark refers to the science of ethics as taught by the Japanese. The authors of the regulations do not believe that ethics can be taught so as to influence conduct unless based upon the sacred scriptures of China.

The last point to which I would call attention is that military drill is required in all the schools, and a uniform is to be adopted for all students. The Chinese civilian has in past centuries been taught to despise the soldier and the art of war, but efforts are now being made to cultivate a martial spirit. There have been military and naval schools for some years in each province, two grades of military and two of naval schools, and in Peking an imperial military college and an imperial naval college, students for which will be supplied from the provincial schools just named. This plan is in abeyance for the present, and to supply the military instruction needed all students will be required to drill, and on reaching the provincial academy will have instruction in military regulations and military tactics, while those who enter the department of law in the university will have special courses in military government.

The discipline of the students is, theoretically at least, very strict. Among other prohibitions they are forbidden to smoke opium, and they are not allowed to interfere in any way in matters that concern the Government. There is reason to fear that the former will not be observed.

One matter of great importance under consideration at present is that of providing the necessary funds for the support of the schools. The regulations require the hsien (county) authorities to provide the primary schools, and it is suggested that in most places there are common funds belonging to the people which, with the consent of their elders, might be devoted to the support of these schools. Such funds are those for village free schools of the old type, for village theatricals, sports, and the support of certain benevolent institutions. It is further suggested that certain temples and clubhouses may be used for school buildings. With respect to the temples, many of them are endowed with lands which furnish revenues for the support of the monks and the maintenance of the sacrifices. One of the reform edicts of 1898 provided for the confiscation of certain classes of such temples for the support of the schools, and this created great disaffection. On the approval of the present regulations steps were taken in some of the provinces, particularly in Fuhkien *and Kuangtung, to* compel the monks to surrender their property. To avoid

doing so a number who had an inkling of what was coming disposed of their property to Japanese Buddhist monks, who could not be compelled to yield to the demands of the officials. This led to an imperial edict forbidding the local authorities to coerce the monks.

For the support of the intermediate schools and academies it is more difficult to find funds. I have already noticed the suggestion that the funds for the old examination system be devoted in part to this purpose. Another plan is that adopted by the viceroy of this province. He has already secured the sanction of the Throne to the levying of a special tax upon deeds for the transfer of real estate. This amounts to 4.9 per cent of the purchase price, of which 3.3 per cent shall be devoted to primary education and 1.6 per cent to the intermediate schools. Two days ago it was decided that henceforth, for three years, no vacancies in the 24 banner corps shall be supplied, and the funds thus saved shall be devoted, one-half to the support of the regular school system and one-half to the support of the proposed military and naval schools. It was also decided to gradually abolish the eight divisions of palace guards, an obsolete organization no longer of use, the funds thus saved to be also applied to educational purposes. The old examination hall in Peking is to be occupied by the military college.

One serious defect in the system remains to be pointed out: No provision is made for the education of girls, except in the kindergarten.

The regulations say that there are many difficulties in the way of the education of girls in China, and that very little can be done for them at present.

There are many high officials who do not agree with this statement of the authors of the regulations. One such high official is Tuan-fang, the governor of Hunan, now on his way to the United States to study our institutions. During his recent visit to Peking he had audience of Her Imperial Majesty the Empress Dowager and laid before her the importance of establishing girls' schools. Her Majesty was much impressed, and at once issued an edict directing that a large abandoned lamasery in Peking should be converted into a girls' college. This has not been done as yet, but several of the princesses, encouraged by this action of the Dowager Empress, have undertaken, without any aid from the state, to establish a number of girls' schools in Peking. At least one of these is absolutely free and is conducted in the residence of Tuan-fang, which is given for a merely nominal rent for this purpose. Others charge a small tuition and are attended by girls from noble families. Some of the princesses have opened schools in their own palaces for their daughters and their relatives. A few Chinese women teachers have been secured, some of them former students in the mission schools. But the new branches, such as arithmetic, geography, foreign history, and the Japanese language, are taught by Japanese ladies, who are giving their services without charge. Besides the branches mentioned, the curriculum embraces music, drawing, dancing, calisthenics, needlework, Chinese reading and writing, physiology, hygiene, physics, natural history, and nursing.

All pupils are required to unbind their feet and are not allowed to paint, powder, wear jewelry, or expensive gowns. They must wear their hair in a braid or plain coil and must dress in a plain blue gown, the only ornament being the rosette which indicates the school to which the pupil belongs. Similar schools have been opened in Tientsin, Chinan Fu, Shanghai, Chinkiang, Nanking, Soochow, Hangchow, and Hankow. I have seen no reports from other places, but the movement appears to be very general and is the most interesting feature in the present situation, though wholly independent of the Government. In all these schools Japanese women appear to be the main reliance so far as *teaching is concerned.*

The missionaries with whom I have discussed the matter seem for the most part to fully appreciate the significance of the educational reforms and rejoice in the prospect of a better condition of society in China. Some, however, look askance at the new school system and seem to think that it will mean a great loss of influence for the missionary, whose pupils will probably desert him for the Government school. I am glad to say that this feeling appears to be shared by very few. The missionaries have every reason to be proud of their past record as educators in China, for although their influence has been indirect the present movement owes very much more to them than appears upon the surface. It is quite true that the importance of their schools will probably lessen with the passing years unless arrangements can be made to admit their graduates to the examinations for official posts, but these schools will always have their special work in preparing men and women for the service of the church, and for many years to come they must probably be depended upon very largely for the needed supply of Chinese instructors in modern branches of learning.

In this connection it may be of interest to furnish some statistics which will show, in a measure, the nature of their work. The latest general report of all Protestant missions in China is dated 1896, and at that date these missions supported for males 747 primary schools, with 11,817 pupils; 45 secondary schools, with 1,539 pupils, and 32 colleges, with 1,224 students; and for females, 225 primary schools, with 4,262 pupils; 69 secondary schools, with 2,096 pupils, and 14 colleges, with 416 students, or a total of 972 primary and 114 secondary schools and 46 colleges, with a grand total of 21,354 pupils and students. By a comparison of recent reports of certain missions with those of a few years ago one must conclude that to allow for an increase of 50 per cent in the number of pupils during the past ten years is a very modest estimate, for a great impulse has been given in educational work since 1900, so that we are safe in reckoning an enrollment of some 30,000 students in connection with Protestant mission schools at present.

I have not been able as yet to obtain any general statistics of Roman Catholic work in China, but the report of the North Chihli Mission of the Lazarists for June 30 last gives the total number of schools in this diocese as 1,474, with a total enrollment of 27,054, about equal to the whole Protestant work in China. If we estimate the total number of pupils in Catholic schools in China at about 500,000 we shall probably be not far from the actual number.

Catholic schools for the most part appear to give an elementary education, supplemented for the ordinary pupil by an industrial course and for the native priest by a course in theology. Protestants appear to give more attention to the higher education.

I have the honor to be, sir, your obedient servant,

E. T. WILLIAMS, *Chinese Secretary.*

SUPPLEMENTARY.

Since writing the above I have received a very interesting letter from Dr. C. D. Tenney, president of the Tientsin University and provincial superintendent of education for Chihli. I append his statistics for this province, calling attention to the fact that the schools which I have called "kindergartens" are classed by him as "primary," and those which I have called "first" and "second grade primaries" are listed as "higher" and "lower grade elementary" schools.

Educational statistics for the province of Chihli.

Institution.	Number.	Pupils.
Primary schools	2,480	72,120
Lower elementary schools	124	6,200
Higher elementary schools	124	6,200
Middle (intermediate) schools	16	950
High school (academy)	1	320
Provincial university (Tientsin)	1	200
Total	2,746	86,000

It is to be noted that the Tientsin University existed before the new system was inaugurated, and that several such colleges have been established in various parts of China, which are no doubt to be affiliated with the new system. The above figures do not include schools in the prefecture of Peking, which are under the metropolitan and not the provincial administration.

E. T. W.

Imperial Edict of December 6, 1905, Organizing the Board of Education.

[Translated from the Peking Gazette.]

We have to-day received a joint memorial from the council of state (or bureau of national administration) and the minister of education, reporting upon the suggestions of Pao-hsi and others. Some time ago we issued an edict abolishing the system of examinations, and it is most urgently necessary that something be done to encourage education so as to develop the talents of men. At present the various provinces are gradually establishing the new schools, and there must be an office that shall have general control of the system and be responsible for the standard set and the direction of the course of study. Therefore we establish the board of education, and Jungch'ing is hereby transferred to be president of the same. The first vice-president shall be Hsi-ying, and the second class Haulin compiler, Yen-hsiu is appointed acting second vice-president of the board of education with the rank of an expectant metropolitan official of the third grade. The Imperial Academy of Learning, known in ancient times as the "Ch'eng Chiin" (i. e., a place where learning is completed) was originally the highest institution of learning. Let all matters pertaining to said institution henceforth be under the control of the board of education. As to matters not yet settled, let the aforesaid president and vice-presidents consult together and devise satisfactory arrangements and report to us. As the said board has but just been established, the commencement of such a work as the encouragement of education and the cultivation of talent is a most important one and the greatest care must be exercised in investigating the subject, and extra attention given to strengthening the system of education in the hope that encouragement of genuine learning and the cultivation of useful talents may fulfill the purpose of the court to establish schools for the improvement of social conditions, the civilization of the people, and the perfection of their customs.

As for other suggestions made, let them be carried out as proposed.

Respect this.

CHAPTER XIII.

REPORT ON EDUCATION IN ALASKA.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION, ALASKA DIVISION,
Washington, D. C., June 30, 1905.

SIR: I have the honor to submit my twentieth annual report as United States general agent of education in Alaska, for the fiscal year ending June 30, 1905.

During the school year, outside of incorporated towns, there have been maintained 51 public schools with 62 teachers and an enrollment of 3,083 pupils.

SOUTHEAST ALASKA.

Haines No. 1.—Miss Amy S. Gaddis, teacher; enrollment, 28; pupils, white.

Haines No. 2.—Miss Mary Mackintosh, teacher; enrollment, 44; pupils, native.

A letter from the teacher states that the children had improved in their personal appearance so much that they could hardly be taken for natives. Native families remained at Haines all the spring for the purpose of keeping their children at school. The girls have been taught needlework.

Hoonah.—Miss Minnie S. Ross, teacher; enrollment, 174; pupils, Thlinget.

As illustrating the civilizing effect of the school, the teacher states that on Christmas eve exercises were held in the church and there were recitations and singing by the children. She says that the children are bright and eager to learn, and can be more easily led by kindness than compelled by punishment. Their main fault is in not being punctual. They are passionately fond of music and are willing to attend school for the sake of the singing. The boys are good in arithmetic, while the girls prefer reading and writing.

Jackson.—Miss Byrde Darby, teacher; enrollment, 53; pupils, native.

The teacher writes that the native children at this place are slow in acquiring English, as they hear it only at school. They are sensitive and proud. The school work is not far advanced, being confined to chart, primary, and intermediate classes. The children are quick in elementary arithmetic, but slow in forming sentences on account of their limited vocabulary. The parents were desirous of having their children go to school.

Kake.—Mrs. Anna R. Moon, teacher; enrollment, 95; pupils, native.

There is the same complaint of irregularity in attendance here that is met in the other reports from Alaska—due to the boys joining their fathers in their avocations of hunting, fishing, etc. The teacher speaks of the ambition of some of the young men who are not satisfied to know only reading and writing, but desire to pass on to other studies. The girls are taught needlework, knitting, basket making, etc. School opened with only 8 pupils.

Kasaan.—Arch R. Law, teacher; enrollment, 49; pupils, native.

This report states that the attendance was regular after the school had fairly started, the parents fully and heartily supporting the teacher in this

respect, as they desired their children to go to school as much as possible and regretted the necessity of taking them away on fishing trips. At the close of the third year the children could all speak English fairly well and understood it perfectly. Their composition was naturally limited in scope of ideas and expression. A number of the girls had been to the industrial school at Sitka. The effect of attending the training school and the missions is very apparent in the comparative refinement shown in the houses of the natives whose children have had the advantage of those schools. Moreover, the natives are beginning to appreciate the school training as a preparation for the increasing competition with the whites. Mr. Law says that already there are school-trained natives who are prepared to compete on an equality with white men in the occupations that can be followed in the region about Kasaan. The education of the young natives should therefore have a practical industrial turn, and above all must inculcate deliberate perseverance.

Killisnoo.—Mrs. Catherine Kilborn, teacher; enrollment, 94; pupils, native. No report.

Klawock.—Miss Nell G. Edgar, teacher; enrollment, 70; pupils, native. No detailed report.

Klinquan.—Samuel G. Davis, teacher; enrollment, 36; pupils, Hydah.

A letter mentions the fact that a night school was kept five nights in the week for the parents and young men. Those who attend this school take an interest in the day school and desire to have their children attend it. The older natives are indifferent to the school.

Klukwan.—Miss Thena A. Brookman, teacher; enrollment, 36; pupils, native.

The teacher reports that most of the children were away with their parents the greater part of the year, either at Sitka or hunting and fishing, so that the attendance was small. She writes that the children learn remarkably well, and if their parents could be persuaded to leave their families behind when going on expeditions there would be some hopes of a native population growing up which could speak English.

Petersburg.—Mrs. J. V. McCullough, teacher; enrollment, 54; pupils, white and Thlinget.

This is a fishing community, and many of the children go to school by boat. Both boys and girls learned needlework and knitting, the latter art being important in the fishing industry. The school sent an exhibit to the Portland fair. The teacher remarks upon the difference between the native idea of color and that of the whites. The natives would imitate correctly the colors of a landscape, etc., set them as copies, but when left to themselves would add colors of their own to trees and flowers without any regard to nature, but more like conventional colors which may have some significance to them.

Saxman.—Mrs. John L. Myers, teacher; enrollment, 63; pupils, native. No detailed report.

Shakan.—Fred Chase, teacher; enrollment, 44; pupils, native.

The teacher says that the children understood and talked English a little among themselves. Some of them could read the hymns at the religious exercises. They voluntarily kept the schoolhouse clean, washing and scrubbing it out about once a month.

Sitka No. 1.—D. M. Daum, Miss C. Duncan, and Miss R. McCaleb, teachers; enrollment, 89; pupils, white.

Mr. Daum reports that during the year the school was placed, so far as possible, on a graded basis. At the beginning of the year a high school was organized with a three-years' course, and 8 pupils in the first year, 2 in the second, and 2 in the third. The course of study included Latin (three years),

algebra, physical geography, general history, literature, plane geometry, rhetoric, composition, and German. Exercises in debating and parliamentary law were also held.

Miss McCaleb writes: Many of the children are very deficient in numbers, writing, spelling, and the correct use of the English tongue. During the year special effort has been made to remedy this defect and the effort has been, in a measure, successful. Tardiness and nonattendance are bugbears which confront the teacher and interfere with efficient work. There are many outside attractions (such as church holidays, potlatches,[a] etc.) which appeal to the mind of the Alaskan small boy, and girl as well. However, during the Russian lenten season the average attendance was in no way reduced.

The pupils yield quite readily to authority, and at no time, to the knowledge of the teacher, has her right to discipline been questioned. Much of the trouble along all lines is due to habits of carelessness acquired by the children, not only since babyhood, but by way of inheritance. When this is educated out of them many other annoyances which face the teacher will cease to exist. Taking everything into consideration, the year's work has been one of progress and the outlook, so far as the children are concerned, is encouraging.

Sitka No. 2.—Miss Jeannette Rice, teacher; pupils, Thlinget; enrollment, 60.

The attractions of fishing and hunting and the indifference of parents, besides several epidemics, interfered disastrously with the attendance. Nevertheless, the testimony of the teacher is that the native children are naturally bright and able to learn. They like music and learn to sing by note; some learn to draw readily. The few who attended steadily learned to read simple English.

Tee Harbor.—H. de Witt, teacher; pupils, native; enrollment, 15.

Yakutat.—E. A. Rasmusson, teacher; pupils, native; enrollment, 52.

At this place the teacher makes the usual complaint of irregularity in attendance. The natives support themselves by salmon fishing and seal hunting most of the year and take their families with them. The pupils who attended regularly made good progress. The children here, as in other schools, take part in the daily devotional exercises. The teacher makes this noteworthy remark, that some of the former pupils of the school, now grown up, are successfully supporting themselves at different avocations, as fur buyers, clerks, interpreters, some even having stores of their own.

WESTERN ALASKA.

Afognak.—Teacher, Miss Hannah E. Breece; pupils, native; enrollment, 102.

The teacher describes the hostility between the Aleuts and mixed bloods and whites. Quarrels, vituperation in Russian, and disorder were the rule at the opening of the year, both in the school and on the street. This was all changed in a few months, and the excellent conduct of the school pupils became a subject of remark in the town. At the beginning of the year no young man in Afognak could read or write or converse in English. Before the year was out, what with the day school and the night school, many could read English. The natives are beginning to see the desirability of knowing English instead of Russian. Miss Breece taught the girls housekeeping, cooking, etc., and the social side of life was cultivated by evening exercises (singing). The ladies of the Baptist home missionary societies of the United States sent books, pictures, cards, etc., which have contributed to giving an air of refinement both to the school and to the dwellings of the natives.

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[a] A native entertainment.

Carmel.—Joseph Kahlen, teacher; pupils, native; enrollment, 35. No detailed report.

Chignik.—James J. Potter, teacher; pupils, half-breeds; enrollment, 20.

School opened with 7 pupils and eventually increased to 20, mostly half-breeds. All started with the primer and made good progress; arithmetic and spelling offered more difficulties than reading and writing. Attendance could be increased if the parents could be interested.

Copper Center.—Mrs. G. S. Clevenger, teacher; pupils, native; enrollment, 25.

The work of the school not only covered the routine work of the primary grades of the public schools, but also took a practical direction, the women being taught to make figures for bead work, cut and make garments, etc., while the young men were taught to make change in small currency and to compute the sale of skins and write their names. The children learn as readily as white children and are obedient and yield to kindness readily.

Ellamar.—Miss Mary Owen Stevens, teacher; pupils, white; enrollment, 20.

Half the school population are half-breeds. The teacher finds that neither whites nor half-breeds do well in the same school with the full bloods, and she criticises the intellectual capacity of the half-breeds, remarking that they have difficulty in expressing themselves in English and have no conception of number and no power of concentrating their thoughts.

Hope.—O. L. Grimes, teacher; pupils, white, half-breed, and Indian; enrollment, 15.

The subjects taught in this mixed school of white, half-breed, and Indian children were reading, writing, spelling, English, geography, arithmetic, grammar, drawing, temperance hygiene, and United States history. The natives learned English partly from the white pupils on the playground; they made more progress in writing and drawing, being strongly imitative. Their teacher, like several others, insists upon the desirability of a compulsory school law to correct the irregularity of attendance.

Kenai.—Mrs. Florence C. Craigie, teacher; pupils, native and creole; enrollment, 15.

The teacher reports little progress with the natives, owing to their irregular school attendance and the difficulty they experienced in learning English after having learned Russian.

Kodiak.—Mr. and Mrs. C. I. Kerr, teachers; pupils, white and native; enrollment, 72.

Seldovia.—Herbert S. Farris, teacher; pupils, white and native; enrollment, 15.

The teacher states that there are nearly 50 children of school age in Seldovia, while only 5 or 6 attended school on an average. They are described as attentive, easily disciplined, and interested in their work.

Seward.—Louise L. Kurtz, teacher; pupils, white and native; enrollment, 37.

The teacher reports that there were only three natives under her instruction—two small girls and a boy of 17—all the rest being white. At the close of the year they could read, write, spell, add, subtract, multiply, and divide. The boy was in higher fractions, had read some history and could read English with ease. He could write English compositions, draw, and construct maps and charts.

Unalaska.—Teachers, William A. Davis and Mary S. Davis; pupils, native; enrollment, 51.

The report mentions particularly the progress in sewing by the girls and in drawing and penmanship by both girls and boys.

Unga.—James C. Patey, teacher; pupils, white and native; enrollment, 31.

The report states that "some of the pupils are quick to learn, easy to get along with, and willing to obey. Most of them are quite desirous of learning. They *are especially interested in reading* good biographies."

Christmas and Washington's Birthday were celebrated with songs and speeches, as at most of the schools. At Unga the parents were apathetic in regard to the schools. They said that it required no learning to enable them to catch cod or hunt sea otter or reindeer.

Wood Island.—Augusta G. Curtis, teacher; pupils, native; enrollment, 50.

The teacher reports that at the close of the year several pupils of the lowest grade were ready for the second reader and the primary arithmetic. All had learned to write, while a few could write letters. Grades three and four took up advanced studies, viz, geography, hygiene, history, and language lessons. Prizes were given at the monthly examinations, and the pupils looked forward to them as important events.

ARCTIC AND NORTHERN ALASKA.

Barrow.—S. R. Spriggs and John H. Kilbuck, teachers; pupils, Eskimo; enrollment, 76.

"The main object kept in view was to get the children in the way of using the English they had already learned. As this is an Eskimo country, and the few white people in it speak the vernacular language, the children have had very little use for English. The plan of the compulsory use of the English language in the schoolroom was introduced and proved to be quite a stimulus to the acquirement and proper use of English words. A failure to conform to the rule was punished by standing. When the rule was first put into force, nearly the entire school was upon its feet at once." Mr. Kilbuck writes of the trouble the children find in distinguishing between the consonants *b*, *v*, *p*, and *t* and *d*. Some of the more advanced pupils kept up their study and practice of English by writing a diary. A marked difference was noticed in the mental activity of the scholars during the sunless period, when the rooms were lighted by artificial light, and the time when the sun appeared, to dispel the gloom of the arctic night. "Another difficulty is the inability of the little Eskimo to study quietly. When they are studying the hardest the din rises almost to the proportions of that heard in a boiler maker's shop. It seems that only in this way can the white man's words be driven home to stay in the Eskimo mind. * * * The school year was closed when several whales were caught. Then everybody, young and old, plunged into freighting meat and blubber ashore. This is the work of the women and children, and secures meat and oil for the family during the next year." Teacher and pupils are eagerly looking forward to the use of a new building next term.

Bethel.—Teachers, Joseph Weinlick and B. K. Helmick; pupils, Eskimo.

The industrial teacher at this place, Mr. B. K. Helmick, reports that the native boys are more or less fond of working with the saw, hammer, plane, etc., and make good progress. The branches taken up are machinery, use of tools, carpentering, boat building, net making, and fish canning.

The school-teacher reports that the boys are quick in comprehending things, but the girls are slow. The majority of the pupils wrote a nice hand and read fluently. In arithmetic, division is very difficult for them to understand, and in composition their range of thought is limited to hunting and fishing.

Bettles.—Mr. and Mrs. D. W. Cram, teachers; pupils, Indian and Eskimo; enrollment, 68.

Bettles is situated midway between the fishing grounds on the south and those on the north. It is thus the meeting place of both tribes, Koyukuks and Kobuks, when the ice breaks up so as to permit fishing. However, just to live is a very serious problem to the people, and they can spare little time for even the children to go to school. During the Christmas season both tribes had a grand celebration, which lasted just as long as the provisions on hand.

Council City.—Mrs. M. B. Young, teacher; pupils, native: enrollment, 35. (No detailed report.)

Deering.—Mrs. Anna H. Foster, teacher, assisted by Miss Bertha Cox; pupils, Eskimo; enrollment, 88.

The reports from Deering have been very encouraging. The natives had a successful season of hunting and fishing, and took a great interest in the school. This interest was increased by the erection of a new school building and the arrival of a reindeer herd. The following quotation from a letter written by Miss Cox will show how some of the industrious young Eskimos spend their summer vacation:

"Some of the boys told me the other day that they were working now to get means so that they could go to school. One of them has been doing laundry work all summer. Another has been hunting game, and also has about 300 eggs put away to sell. The girls do washing and all kinds of cleaning for the whites. Some of them are now cooking for the Eskimo workmen. They make fairly good bread."

Gambell (St. Lawrence Island).—E. O. Campbell, M. D., teacher; pupils, Eskimo; enrollment, 67.

Doctor Campbell writes: "The average attendance for the year was 61, more than treble the attendance in 1900. We have pursued the same policy of making the school the most attractive place to be found on the island. The magazines you have sent did most excellent service, and we trust you have sent a fresh supply for the coming winter. Many of the illustrations were used in teaching new words and have been the cause of many questions."

Golofnin.—Miss Anna Hagberg, teacher; pupils, Eskimo; enrollment, 84.

The teacher reports that the attendance was good and the children willing to go to school. They are fond of music. It is noticeable that at this place, when the natives went away to hunt, many of them arranged to leave their children who were attending school with other families, so that their studies would not be interrupted. The girls were taught housekeeping and sewing and the boys practical hand work. Many native children, who came from distant places during the winter, had to be sent back for want of accommodations.

Ikogmute.—F. F. Fellows, teacher; pupils, native: enrollment, 31.

The school room of the Russian Church was used for the Government school. The natives learned to speak English a little and understand more during the year's schooling. The teacher regards the learning of Russian by the native children as detrimental to their English education, "as they are not capable of handling more than one language."

Koserefsky.—A. J. Markham and Miss Mary Winifred, teachers; pupils, native; enrollment, 104.

The attendance at this school has been remarkably regular all through the year. There was not one case of illness among the school children throughout the whole year. "The boys' school is divided into the American and the English side, each side having its own flag and each pupil pitted against one of the other side. Every Friday is flag day, when the errors of both sides are counted up, and the side having the least number of errors captures the flag of the other side." While on the school ground each pupil is constantly on the watch to catch an opponent in some error, for each correction counts as a point against the other side. This plan keeps up a good spirit of rivalry, stimulating the whole class to do its best. Several public entertainments and the formation of a cadet company have increased the success of the school work.

Kotzebue.—Mrs. Otha Thomas, teacher; pupils, Eskimo; enrollment, 164

From a table in the report it appears that reading, writing, spelling, and arithmetic were the studies having the greatest number of students, while language;

grammar, and history had the fewest. But the interest in the school and eagerness to learn, which were mentioned in the report for 1904, still continue. In some cases pupils would take books to their distant homes, and on returning several weeks later give evidence that they had been studying. Some pupils came 150 miles to attend school, and even children of bands temporarily camping in the neighborhood attended school.

Nulato.—Miss Mary Stephen, teacher; pupils, native; enrollment, 40.

The teacher says: "School began August 7 with an attendance of 30, and continued till September 7, when almost all left with their parents for the autumn fishing grounds and did not return until November 15, when I again resumed teaching." The children are "smart and intelligent, and like to attend school even against the wishes of their parents." They excelled in arithmetic, writing, and drawing.

Quartz Creek.—Mrs. L. Reed, teacher; pupils, Eskimo; enrollment, 30.

Quinhagak.—Mrs. L. A. Schoechert, teacher; pupils, native; enrollment, 28. (No detailed report.)

Rampart.—Miss Emily B. Parke, teacher; pupils, white, half-breed, and Indian; enrollment, 38.

As both Indians and half-breeds spoke only the native language, it was difficult at first for the children to acquire a sufficient English vocabulary to enable them to form sentences, and the pronunciation of English presented many difficulties. The teacher adds: "My experience in teaching has been wide and varied, and I have found these native children of the Yukon country quite as apt at learning as the average class of white children in the States. They are imitative and learn to write and draw readily. They are fond of music and have good voices and keen tone perception. At number work they seem rather slow." That the children are docile is remarkable, considering the evil home surroundings of many of them.

St. Michael.—V. L. Derby, teacher; pupils, Eskimo; enrollment, 74.

Teller.—Ludvig Larson, teacher; pupils, Eskimo and half-breed; enrollment, 23.

The branches taught at this school were reading, spelling, language lessons, arithmetic, geography, writing, drawing, religion, and singing. The teacher observes that the natives quickly learn to read fairly well, but have difficulty in understanding what they read. The pronunciation demands so much attention that their minds are diverted from the meaning; even when they know the meaning of the separated words they are unable to grasp their relation. They understand what they hear better than what they read, but can express themselves in writing better than orally. They commit to memory readily and quickly learn the operations of arithmetic, but have difficulty in applying them to the solution of problems. They have good powers of observation, and many of them have a talent for drawing. As pupils, the native children are easily managed and generally industrious. The boys perform the out-of-door labor about the station, while the girls do general housework, washing, sewing and mending, cooking, etc.

Teller City.—E. D. Orbell, teacher; pupils, white; enrollment, 23.

Unalakleet.—Miss Hannah E. Olson and Misha Ivanoff, teachers; pupils, Eskimo; enrollment, 261.

The studies in the advanced department were reading, spelling, arithmetic, geography, United States history, physiology, temperance hygiene, vocal music, drawing, writing, and sewing. There was an evening school attended by adults as well as boys and girls. The pupils take great interest in learning the white people's way of doing things they already know about, e. g., sewing, and they *learn readily.* The teacher reports that the studies in which they made most

progress were reading, language, arithmetic, drawing, and writing. The pupils are encouraged in writing by corresponding with other schools.

The primary department reports especial progress in reading, spelling, and arithmetic. Both schools have devotional exercises in which the pupils take part.

Wales.—A. N. Evans, teacher; pupils, Eskimo; enrollment, 108. (No detailed report.)

Yukon.—Frederick E. Willard, teacher; pupils, Indian and white; enrollment, 24.

The teacher reports that the children and their parents soon lost interest in the school after the novelty had worn off, and it required the exhortations of the Indian minister and the command of the chief to induce the children to attend. The children accompanied their parents on their annual hunting trips, and the teacher visited the camps and taught the children there. He visited one camp 36 miles distant a number of times, going one day and returning the next. He says that the Indians are inferior to the Thlingets and Eskimos of the west coast, but he cites exceptions.

Historical table—Statistics of public schools in Alaska, 1892 to 1905.

Schools.	Length of school term and enrollment of pupils																							
	1892–93.		1893–94.		1894–95.		1895–96.		1896–97		1897–98.		1898–99.		1899–1900.		1900–1901		1901–2		1902–3		1903–4.		1904–5.	
	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.
SOUTHEAST ALASKA.																								
Sitka:																								
No. 1 (whites)	9	50	7	43	9	57	9	40	9	39	9	42	9	31	9	47	8	46	9	56	9	68	9	60	9	56
No. 2 (natives)	9	48	9	110	9	180	9	156	9	154	8	170	9	175	9	184	8	121	9	135	9	127	5	110	9	64
Industrial																			9	131						
Juneau:																										
No. 1 (whites)	9	23	9	25	9	54	9	70	9	86	9	72	9	74	9	96										
No. 2 (natives)	9	61	9	65	9	50	9	67	9	70	9	40	9	71	9	70	9	75								
Douglas:																										
No. 1 (whites)	8	13	9	30	0	42	9	57	7	75	9	46	9	70	8	100	8	95	7	62						
No. 2 (whites)									8	32	9	25	9	28	9	37	8	37								
Douglas (natives)	9	108	9	85	7	26																				
Skagway (whites), 4 schools													7	109	9	214										
Wrangell (whites and natives)	9	40	9	54	8	61	9	82	9	64	9	71	9	80	9	114	9	148								
Whites																			9	77	9	54				
Natives																			9	44	9	50				
Jackson (natives)	9	82	8	90	7	80	8	64	9	84	9	121	9	67	9	51	8	88	8	62	9	56	9	53	9	54
Haines:																										
No. 1 (natives)	9	54	9	41	9	64	8	60	9	68	7	46			8	64	7	46	9	51	9	53	9	58	9	44
No. 2 (whites)																									9	26
Hoonah (natives)							5	144	5	120	9	141	9	126	9	125	8	121	9	190	9	108	8	100	9	174
Metlakahtla (natives)					6	105							9	144												
Saxman (natives)							7	31	8	75	8	63	9	62	9	76	7	66	9	17	6	56	9	55	7	61
Killisnoo (natives)	9	137	5	75																	7	103	9	100	9	94
Klawock (native)					2	50															9	48	9	45	9	70
Gravina (natives)															8	61	7	69	7	40	9	61	5	50		
Dyea (whites)															5	23										
Kake (natives)															4	87	3	88	4	83	9	96	6	85	9	95
Kasaan																					9	48	9	39	9	39
Klinquan																					9	46	9	38	9	43
Yakutat																					9	120	9	130	9	52
Kiukwan																							7	45	8	35
Shakan (natives)																									8	44
Petersburg (whites and natives)																									8	54
Tee Harbor (natives)																									5	15

Historical table—Statistics of public schools in Alaska, 1892 to 1905—Continued.

Schools.	Length of school term and enrollment of pupils.																							
	1892-93.		1893-94.		1894-95.		1895-96.		1896-97.		1897-98.		1898-99.		1899-1900		1900-1901		1901-2.		1902-3.		1903-4.		1904-5.	
	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught	Enrollment.	Months taught	Enrollment	Months taught.	Enrollment.	Months taught.	Enrollment	Months taught	Enrollment.	Months taught.	Enrollment	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.	Months taught.	Enrollment.
WESTERN ALASKA.																								
Kadiak (whites and natives)	9	74	9	59	9	58	8	49	9	52	9	72	9	44	8	66	8	107	9	71	9	77	9	75	6	73
Afognak (natives)	8	40	9	38	9	36	9	39			9	59	9	36			8	43	9	32	9	35	8	34	9	102
Wood Island (natives)											12	56	7	56	9	61	8	63	10	56	9	47	9	43	9	80
Copper Center																							9	40	4	25
Unga (whites and natives)	8	35	9	36	9	40	9	44	9	46	9	40	7	36	9	47	9	39	11	27	9	18	9	22	9	31
Unalaska (whites and natives)			9	24	9	30	9	39	9	48	9	68	8	31	9	76	9	95	10	74	9	90	9	99	9	51
Karluk (natives)							9	27	9	28																
Carmel																	5	41	6	38	9	23	9	25	9	35
Belkofski																			2	39	2	39				
Kenai																					2	33			9	15
Ellamar																							8	15	9	20
Chignik (whites)																									6	20
Seldovia (whites)																									8	15
Hope (whites)																									9	15
Seward (whites)																									9	37
ARCTIC AND NORTHERN ALASKA.																										
Kotzebue																			9	59	9	77	5	130	9	164
Koserefsky:																										
No. 1																				75	9	78	9	29	9	39
No. 2																				75	9	39	9	81	9	65
Nome																	8	65								
Port Clarence (natives)	5	20	7	30	8	56	9	56	9	53	7	50					8	15	9	19	9	19	9	20	9	23
Gambell					7	52	9	68	9	66			8	70	8	72		72	9	82	9	58		85	9	75
Cape Prince of Wales							9	104	7	132								80	8	50	9	143	9	121	9	108
Point Barrow									6	41	6	66		46		50		50	9	80			9	100	9	76
Circle City									8	43																
Eaton Station														11				30								
Teller																			7	16	9	25			6	23
Golofnin																					9	55	9	61	9	84
St. Michael																					9	47	9	85	7	74

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Public schools in Alaska—enrollment and attendance during 1904-5.

School	1904.								1905.	
	September		October		November		December.		January.	
	Total	Average	Total	Average.	Total.	Average.	Total	Average.	Total.	Average.
Southeast Alaska.										
Haines										
Whites			21	17	20	13	17	15	19	15
Natives	24	11	26	12	31	20	32	30	29	11
Hoonah (natives)	37	10	96	19	101	40	61	27	89	28
Jackson (natives)	20	6	37	15	40	24	43	24	34	20
Kake (natives)	11	8	43	19	73	41	98	45	92	35
Kasaan (natives)	21	10	30	26	31	27	32	25	30	22
Killisnoo (natives)	42	12	45	14	38	14	38	15	40	14
Klawock (natives)	58	20	40	19	45	24	46	30	42	20
Klinquan (natives)	9	3	29	21	29	23	34	25	31	25
Klukwan (natives)	33	15	28	13	9	6	14	10	20	11
Petersburg (whites and natives)			21	12	20	12	31	15	29	15
Saxman (natives)	13	3	18	7	40	13	38	18	29	13
Sitka										
Whites	36	28	72	55	63	50	61	39	60	36
Natives	32	14	38	15	29	16	40	18	28	9
Shakan (natives)			22	10	25	18	20	24	26	10
Tee harbor (natives)									10	9
Yakutat (natives)	28	7	38	10	39	11	10	16	40	12
Western Alaska.										
Afognak (natives)	73	59	79	64	77	63	73	61	77	55
Carmel (natives)	22	13	19	13	22	13	18	12	21	13
Chignik (whites)					9	6	10	8	10	10
Copper Center (natives)										
Ellamar (whites)	15	14	15	14	16	15	16	15	19	15
Hope (whites)			12	10	13	10	13	10	15	10
Kenai (whites)	9	4	9	8	9	8	10	9	12	8
Kodiak (whites and natives)	66	63	71	65	69	63	68	61	67	57
Seldovia (whites)					7	7	11	8	12	8
Seward (whites)			25		21	22	21	18	20	19
Unalaska (natives)	37	30	43	34	46	39	45	41	44	35
Unga (natives)	28	24	31	27	31	25	28	25	27	24
Wood Island (natives)	36	32	33	30	41	35	38	29	32	30
Arctic and northern Alaska.										
Barrow (natives)	34	29	43	25	49	31	54	37	53	33
Belcher (natives)	62	44	72	50	72	57	59	49	80	56
Bettles (natives)			12	8	40	8	47	9	12	8
Council City (whites and natives)					47	33	37	30	28	23
Dering (natives)			46	30	33	21	40	25	44	27
Gambell (natives)			66	64	67	62	69	67	70	66
Golofnin (natives)	29	25	48	36	59	55	65	60	63	57
Ikogmute (natives)			16		22		20		19	
Koserefsky (natives)	99	99	99	99	99	98	100	97	103	100
Kotzebue (natives)	62	15	18	8	37	22	30	31	61	38
Nulato (natives)	34	20			20	18	20	18	34	20
Quartz Creek (natives)					24	20	24	18	29	18
Quinhagak (natives)					19	16	25	23	25	19
Rampart (whites and natives)	23	13	29	17	19	12	27	15	20	15
St. Michael (natives)					61	32	46	22	30	19
Teller Reindeer Station (natives)	23	21	23	17	23	17	23	16	19	17
Teller City (whites)							22	17	23	15
Unalakleet[a] (natives)	70	45	84	81	149	133	138	130	127	117
Wales (natives)			72	36	93	46	73	36	96	42
Yukon (natives)	17	16	19	10	15	10	13	9	6	2

[a] School in session July and August, 1904, and July, 1905.

Public schools in Alaska—enrollment and attendance during 1904–5—Continued.

School.	1905. February.		March		April.		May.		June.	
	Total	Average	Total	Average	Total.	Average	Total.	Average	Total.	Average.
Southeast Alaska.										
Haines:										
Whites	21	15	21	18	20	17	18	16	15	13
Natives	27	17	31	19	29	16	20	12	..	...
Hoonah (natives)	92	53	75	25	55	16	63	11	..	....
Jackson (natives)	23	13	21	12	3	3	3	1	..	...
Kake (natives)	60	36	32	21	12	9	12	11	..	....
Kasaan (natives)	27	21	24	16	19	12	16	13	..	...
Killisnoo (natives)	40	15	21	8	49	14	44	14	..	.....
Klawock (natives)	30	17	21	13	19	8	26	11	..	....
Klinquan (natives)	33	23	27	18	30	20	27	11	..	.....
Klukwan (natives)	23	14	18	14	14	8	..	..	..	.....
Petersburg (whites and natives)	29	18	25	12	20	15	29	14	..	....
Saxman (natives)	17	7	21	2	..	..	..	..	..	....
Sitka:										
Whites	61	40	60	49	59	48	59	49	..	..
Natives	17	9	27	11	45	12	14	4	..	..
Shakan (natives)	24	11	6	5	16	7	24	11	..	..
Tee Harbor (natives)	12	6	14	6	15	7	13	8	..	..
Yakutat (natives)	50	13	52	9	52	6	52	6	....	.....
Western Alaska.										
Afognak (natives)	73	53	74	59	76	61	71	55	....	.....
Carmel (natives)	22	11	25	15	17	12	17	10	....	.....
Chignik (whites)	10	7	8	7	15	11	19	14	19	15
Copper Center[a] (natives)	..	..	..	..	..	..	25	5	22	3
Eliamar (whites)	19	13	20	16	20	11	13	9	..	.....
Hope (whites)	15	11	13	9	13	9	12	9	10	7
Kenai (whites)	12	10	9	9	13	8	13	11	..	....
Kodiak (whites and natives)	58	45	..	..	..	..	..	..	..	.....
Seldovia (whites)	10	7	9	6	8	5	7	5	5	4
Seward (whites)	20	19	25	19	25	18	25	19	20	16
Unalaska (natives)	44	39	43	30	41	37	50	47	..	.....
Unga (natives)	25	22	25	24	20	19	17	15	..	.....
Wood Island (natives)	40	36	40	36	30	30	30	34	..	....
Arctic and northern Alaska.										
Barrow (natives)	54	29	53	38	46	29	38	15	..	.....
Bethel (natives)	80	53	80	51	67	26	67	20	..	...
Bettles (natives)	13	9	20	16	19	13	27	22	..	....
Council City (whites and natives)	30	23	21	19	31	16	19	5	..	.....
Deering (natives)	42	25	43	23	36	18	45	[b]19	..	.....
Gambell (natives)	69	65	73	67	72	66	71	65	..	.....
Golofnin (natives)	60	55	59	52	56	40	45	39	..	....
Ikogmute (natives)	23	....	23	....	16	4	10	3	8	3
Koserefsky (natives)	102	102	103	103	104	102	104	104	..	.....
Kotzebue (natives)	35	22	41	25	36	[c]46	....	..	....	.....
Nulato (natives)	18	10	19	17	16	16	18	10	36	14
Quartz Creek (natives)	27	16	22	18	19	15	..	..	..	..
Quinhagak (natives)	19	16	20	15	16	14	..	....	..	..
Rampart (whites and natives)	23	16	21	16	23	15	17	13	..	..
St Michael (natives)	30	22	28	18	23	15	17	10	..	....
Teller Reindeer Station (natives)	20	16	20	17	19	15	12	11	..	....
Teller City (whites)	20	12	17	11	9	9	9	7	..	....
Unalakleet[a] (natives)	124	103	76	69	57	46	54	50	..	....
Wales (natives)	92	38	78	36	76	30	60	23	..	....
Yukon (natives)	6	5	2	2	4	4	9	3	7	2

[a] School in session July and August, 1904, and July, 1905.
[b] July.
[c] Day and night sessions during November, December, January, and February.

Personnel.

Name.	Office.	Appointed from.
Sheldon Jackson	General agent of education in Alaska	Alaska.
William Hamilton	Assistant agent	Pennsylvania.
Walter C. Shields	Clerk to general agent	Do.
Mrs. L. E. Condron	Stenographer	Dist. Columbia.
William A. Kelly	Superintendent, southeast Alaska	Pennsylvania.
Carl O. Lind, M. D	Superintendent, central Alaska	Wisconsin.
William T. Lopp	Superintendent, northern Alaska	Indiana.

Teachers in public schools, 1904–5.

Teacher.	School.	Appointed from.
Miss Hannah E. Breece	Afognak	Pennsylvania.
Miss Thena A. Brookman	Klukwan	Missouri.
E. O. Campbell, M. D	St. Lawrence Island	California.
Fred Chase	Shakan	Missouri.
Mrs. G. S. Clevenger	Copper Center	Washington.
Mrs. F. C. Craigie	Kenai	Alaska.
D. W. Cram	Bettles	Minnesota.
Mrs. D. W. Cram	....do	Do.
Miss A. G. Curtis	Wood Island	Alaska.
Miss Byrde Darby	Jackson	Missouri.
D. M. Daum	Sitka	Washington.
William A. Davis	Unalaska	Indiana.
Mrs. W. A. Davis	....do	Do.
S. G. Davis	Klinquan	Alaska.
V. L. Derby	St. Michael	Oregon.
Haines De Witt	Tee Harbor	Alaska.
Miss C. Duncan	Sitka	Missouri.
Miss Nell G. Edgar	Klawock	Kansas.
A. N. Evans	Wales	Pennsylvania.
Herbert S. Farris	Seldovia	Washington.
F. F. Fellows	Ikogmute	Oregon.
Mrs. A. H. Foster	Deering	California.
Miss Amy S. Gaddis	Haines	Iowa.
Miss R. Georgeson	Sitka (substitute)	Alaska.
O. L. Grimes	Hope	Washington.
B. K. Helmick	Bethel	Wisconsin.
Miss Anna Hagberg	Golofnin	Illinois.
Thomas Illayok	Wales	Alaska.
Misha Ivanoff	Unalakleet	Do.
Joseph Kahlen	Carmel	Pennsylvania.
Chas. I. Kerr	Kodiak	Colorado.
Mrs. C. I. Kerr	....do	Do.
Mrs. C. Kilborn	Killisnoo	Pennsylvania.
J. H. Kilbuck	Wainwright	Kansas.
Miss L. L. Kurtz	Seward	Missouri.
Ludvig Larson	Teller	Washington.
Arch R. Law	Kasaan	Missouri.
Miss Mary Mackintosh	Haines	Alaska.
A. J. Markham	Koserefsky	Dist. Columbia.
Miss R. McCaleb	Sitka	Missouri.
Mrs. J. V. McCullough	Petersburg	Minnesota.
Mrs. A. R. Moon	Kake	Indiana.
Mrs. J. L. Myers	Saxman	Missouri.
Miss Hannah E. Olson	Unalakleet	Illinois.
E. D. Orbell	Teller City	Alaska.
Miss Emily B. Parke	Rampart	Do.
James C. Patey	Unga	Pennsylvania.
James J. Potter	Chignik	Oregon.
Edward A. Rasmusson	Yakutat	Wisconsin.
Mrs. L. Reed	Quartz Creek	California.
Miss Jeannette Rice	Sitka	Hawaii.
Miss M. S. Ross	Hoonah	Alaska.
Mrs. L. A. Schoechert	Quinhagak	Pennsylvania.
S. R. Spriggs	Barrow	New York.
Miss Mary Stephen	Nulato	Canada.
Miss M. O. Stevens	Ellamar	Illinois.
Mrs. Otha Thomas	Kotzebue	California.
Joseph Weinlick	Bethel	Wisconsin.
Mrs. J. Weinlick	....do	Do.
F. E. Willard	Fort Yukon	Illinois.
Miss Mary Winifred	Koserefsky	Canada.
Mrs. M. B. Young	Council City	Alaska.

NEW SCHOOL BUILDINGS.

In the winter of 1904–5 the Secretary of the Interior set apart $60,000 from the license money for the erection of additional school buildings in Alaska. These buildings were located at Point Hope, Kivalina, Deering, and Shishmaref, on the Arctic coast; Haines, Howkan, Kake, Kilisnoo, Klawock, Klinquan, Klukwan, Shakan, Tee Harbor, and Wrangell.

SCHOOL FUND.

During the first half of the fiscal year the schools outside of incorporated towns in Alaska, both native and white, were sustained by 50 per cent of the license fees collected from unincorporated towns. The act of January 27, 1905, separated the white schools from those of the natives. This act placed the white schools of the Territory under the governor and left the native schools under the Bureau of Education. Section 7 of this act reads as follows:

That the schools specified and provided for in this act shall be devoted to the education of white children and children of mixed blood who lead a civilized life. The education of the Eskimos and Indians in the district of Alaska shall remain under the direction and control of the Secretary of the Interior, and schools for and among the Eskimos and Indians of Alaska shall be provided for by an annual appropriation, and the Eskimos and Indian children of Alaska shall have the same right to be admitted to any Indian boarding school as the Indian children in the States or Territories of the United States.

In accordance with this act Congress appropriated $50,000 for the education of the natives in Alaska during the fiscal year ended June 30, 1906.

The following table shows the history of Congressional appropriations for education in Alaska:

First grant to establish schools, 1884	$25,000.00
Annual grants, school year—	
1886–87	15,000.00
1887–88	25,000.00
1888–89	40,000.00
1889–90	50,000.00
1890–91	50,000.00
1891–92	50,000.00
1892–93	40,000.00
1893–94	30,000.00
1894–95	30,000.00
1895–96	30,000.00
1896–97	30,000.00
1897–98	30,000.00
1898–99	30,000.00
1899–1900	30,000.00
1900–1901	30,000.00

Amounts received from one-half of license fees collected outside of incorporated towns in Alaska:

March 3, 1901, to June 30, 1902 (sixteen months)	$35,882.41
July 1, 1902, to June 30, 1903	19,742.62
July 1, 1903, to June 30, 1904	103,377.30
July 1, 1904, to June 30, 1905	145,153.65

Expenditure for schools outside of incorporated towns, Alaska, 1904–5.

Salaries:	
5 officials	$6,874.67
62 teachers (1904–5)	44,450.41
12 teachers (1903–4)	1,985.61
Supplies, 54 schools	4,731.44
Repairs, 54 schools	2,937.30
Erection of school buildings	10,781.41
Fuel and light, 34 schools	3,893.71
Rent, 5 buildings for school purposes	239.00
Traveling expenses:	
30 teachers	2,056.91
3 carpenters and 4 officials	1,223.15
Freight, 13 schools	12,611.41
Printing of reports, blanks, etc	410.05
Office supplies	136.15
Balance of $60,000 set apart for buildings by secretary	49,218.59
Total	141,549.81

All of which is respectfully submitted.

SHELDON JACKSON,
United States General Agent of Education for Alaska.

Dr. W. T. HARRIS,
Commissioner.

CHAPTER XIV.

REINDEER IN ALASKA, 1905.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION, ALASKA DIVISION,
Washington, D. C., June 30, 1905.

SIR: The year 1905 completes fifteen years of reindeer work in Alaska. The need of the introduction of domestic reindeer as a means of saving the inhabitants of the northern and northwestern regions of the Territory from starvation had been impressed upon me at the time of my first visit (1890). Upon my return to Washington from my annual inspection of schools in Alaska, in a preliminary report to you dated November 12, 1890, I called attention to the destitution of the Eskimos of northwestern Alaska and recommended the introduction of Siberian reindeer for their relief.

This report was transmitted by you December 5, 1890, with your approval of the recommendation, to the Secretary of the Interior, who in turn, on the 15th of December, 1890, transmitted the same to Congress for an appropriation.

Upon the failure of the Fifty-first Congress (1891) to take action, and deprecating the delay of twelve months before another attempt to secure Congressional action, with your approval I made an appeal in the spring of 1892 to the general public, through the newspapers of the East, for contributions to this object. The response was prompt and generous; $2,146 were received. With this fund I commenced the purchase of reindeer in Siberia and their transfer to Alaska.

On March 3, 1893, Congress made the first appropriation, $6,000, for the introduction of domestic reindeer into Alaska.

The Secretary of the Interior intrusted the management of this fund to the Commissioner of Education, and you accordingly made the introduction of domestic reindeer and the instruction of natives in the arts of herding, harnessing, driving, etc., a part of the system of industrial education maintained by the Government in Alaska.

The results speak for themselves, and confirm the opinions that prompted the undertaking and prove the wisdom of the plans by which it has been carried on. The introduction of domestic reindeer into Alaska is no longer an experiment, and it only remains to continue under the supervision of the Government until its benefits have been extended to all the people of arctic Alaska.

SUMMARIZED STATISTICS OF THE REINDEER HERD.

The following tables show the number of domestic deer imported into Alaska from Siberia, the annual increase of the herd, and the annual appropriations

by Congress for the work. The year referred to is always the fiscal year ending June 30:

TABLE 1.—*Annual growth of the reindeer herd since 1892.*

[This table includes, in addition to Government deer, those owned by mission stations, Lapland herders, and apprentices.]

Year.	Deer brought forward from previous year.	Imported from Siberia.	Fawns surviving.	Sold, butchered,[a] or died.	Total in herd at end of year.	Per cent of increase by fawns.
1892	.....	171	.....	28	143	.....
1893	143	124	79	23	323	55
1894	323	120	145	96	492	44
1895	492	123	276	148	743	56
1896	743	.....	357	100	1,000	49
1897	1,000	.....	466	[b]334	1,132	48
1898	1,132	161	625	185	1,733	55
1899	1,733	322	638	299	2,394	37
1900	2,394	29	756	487	2,692	32
1901	2,692	200	1,110	538	3,464	41
1902	3,464	80	1,654	353	4,795	48
1903	4,795	.....	1,877	290	6,282	40
1904	6,282	.....	2,284	377	8,189	36
1905	8,189	.....	2,978	926	10,241	41

[a] When the slaughter of deer is spoken of it in no case refers to the Government deer, but only to the deer which are the property of stations and apprentices, the same being the increase of the herds loaned to them. The Government deer loaned to the missions or to the Lapland herdsmen have to be returned deer for deer as loaned to them, and no one slaughters Government deer or gives them away. Male deer may be slaughtered or sold by the apprentices only with the advice and consent of the superintendent at the reindeer station. It has been understood that the superfluous males belonging to the station may be sold.

[b] Two hundred and forty-six of these deer were slaughtered for the relief of the shipwrecked whalers at Point Barrow.

Table 1 shows that the increase by fawns for 1905 was two and a third times the entire importation of herds of deer from Siberia.

The Russian Government placed such restrictions upon the purchase of reindeer from the natives that no deer were obtained in 1896 and 1897, and the importation of deer ceased altogether with 1902.

TABLE 2.—*Congressional appropriations for the introduction of domestic reindeer into Alaska.*

Year.	Amount.	Year.	Amount.
1894	$6,000	1901	$25,000
1895	7,500	1902	25,000
1896	7,500	1903	25,000
1897	12,000	1904	25,000
1898	12,000	1905	25,000
1899	12,500		
1900	25,000	Total	207,500

THE REINDEER STATIONS.

The 10,241 reindeer in Alaska in 1905 were distributed among three classes of stations, namely: Government stations, at which the school and the herd are entirely under Government control; mission stations, to each of which a small herd of reindeer has been loaned by the Government as an equipment for industrial training; and relief stations.

Arrangements with the mission stations.—The arrangements with the mission stations propose—

1. The loan of small herds to the stations as an outfit of industrial apparatus, the same to be repaid to the Government at the end of a specified period by an equal number of young deer in the same proportion of males and females—i. e., 25 to 75. The slaughter or sale of female deer was strictly prohibited from the first, and male deer might be slaughtered or sold only with the consent of the superintendent of the station.

2. That on its part the mission station receiving a loan shall support a corps of apprentices while under instruction in the art of herding and training deer. It takes about five years for an apprentice to master all the details connected with the management of reindeer. At the completion of this course of training each faithful and efficient apprentice is given enough deer to enable him to start an independent herd.

3. The Government on its part provides the mission station with a competent Lapp or Finn teacher in the art of reindeer herding, harnessing, etc., for the first five years; at the end of that time the mission apprentices will be competent to assume complete control of the herd. All of these general regulations, as well as those peculiar to each station, are specified in the contracts made with the various missionary societies.

Relief stations.—In order to meet emergencies such as arose in 1897–98 in connection with the expeditions under Lieutenant Jarvis, of the United States Revenue-Cutter Service, for the relief of the whalers ice-bound in the Arctic Sea near Point Barrow, and with the efforts for the relief of a company of starving miners in the Yukon Valley, reindeer herds were established at localities where they would be needed for such purposes.

Statistics of reindeer stations.—The following tables present the chief items relating to the distribution, ownership, etc., of the reindeer at the several stations as reported in 1905. In the first of the series (Table 3) the mission stations are indicated by an asterisk.

TABLE 3.—*Number and sex of deer in herds at the various stations in 1905.*

Station.	Adults.			Fawns, 1905.			Total.
	Male.	Female.	Total.	Male.	Female.	Total.	
Barrow	169	298	467	72	90	162	629
Kivalina *	.....	.....	153	.....	.....	67	220
Kotzebue *	181	315	496	118	118	236	732
Deering *	106	225	331	60	79	148	479
Shishmaref *	113	208	321	66	73	139	460
Wales *	253	416	669	135	138	273	942
Gambell	64	91	155	16	18	34	189
Teller *	212	415	[a] 649	.....	.....	292	941
Golofnin *	297	511	808	187	169	356	1,164
Unalakleet *	335	427	762	144	114	258	1,020
Eaton *	343	423	766	127	115	242	1,008
Bethel *	280	613	893	221	215	436	1,329
Nulato *	47	147	194	.....	.....	96	290
Iliamna	109	190	299	76	63	139	438
Bettles [b]	75	225	300	.....	.....	100	400
Total	2,584	4,504	7,263	1,231	1,192	2,978	10,241

[a] Includes 22 deer unclassified as to sex.
[b] No complete report received; number estimated.

TABLE 4.—*Reindeer loaned.*

[The five Laplanders named in this table (marked with an asterisk) were brought over by the War Department in 1898 to assist in driving a herd of reindeer to the Yukon Valley, where American miners were reported to be in danger of starvation. After the disbanding of the expedition this office, under advice, took them into its employ to teach the Eskimo apprentices the industries connected with reindeer herding. As a return for their services they each received a loan of 100 deer for five years.]

Station.	Loaned.	When loaned.	When due.
Wales (Congregational)	118	Aug. —, 1894	Gift.
Golofnin Bay (Swedish Lutheran)	50	Jan. 16, 1896	Returned.
Tununa (Episcopal)	50	.....do.....	Do.
Nils Klemetsen*	100	July 1, 1902	July 30, 1907.
Teller (Norwegian Lutheran)	100	Sept. 1, 1900	Returned Sept., 1905.
Nulato (Roman Catholic)	100	Mar. —, 1901	Mar. —, 1906.
Bethel (Moravian)	88	Feb. 26, 1901	Feb. —, 1906.
Nils Persen Sara*	100	July —, 1901	June 30, 1906.
Carmel (Moravian)	88	Feb. 26, 1901	Feb. —, 1906.
Per M. Spein*	100	July —, 1901	June —, 1906.
Kotzebue (Friends)	95	Sept. 2, 1901	Sept. —, 1906.
Unalakleet (Swedish Lutheran)	100	July 1, 1903	June 30, 1908.
Alfred S. Nilima*	99	July —, 1901	June 30, 1906.
Ole O. Bahr*	100	July 1, 1901	Do.
Deering (Friends)	100	Jan. 18, 1905	Jan. 18, 1910.

Nils Klemetsen is in charge of the herd at Golofnin Bay; Nils Persen Sara, in charge of the first Bethel herd; Per M. Spein, in charge of the second Bethel herd; Alfred S. Nilima, in charge of the Kotzebue herd; Ole O. Bahr, in charge of the Unalakleet herd.

The following table (5) showing the ownership of reindeer at stations in 1905, taken in connection with Table 6 pertaining to apprentices and their holdings, makes it very evident that the purpose of getting the reindeer into the possession of thrifty natives has been kept steadily in view and is being realized as rapidly as the conditions permit. The Government owns 3,073 deer, the stations 2,127, Lapland herders 1,189, and 78 apprentices 3,817 deer, or 37 per cent of the total number. It should be remembered that the deer owned by the Lapland herders and the stations, or 32 per cent of the total, are in the nature of an equipment for the industrial training of the natives.

TABLE 5.—*Ownership of reindeer.*

Station.	Government.	Station.	Herders (Laplanders).	Apprentices.	Total.
Barrow	83	.....	.....	546	629
Kivalina	.....	.....	.....	220	220
Kotzebue	194	215	271	40	[a]732
Deering	100	28	.....	351	479
Shishmaref	.....	166	.....	294	460
Wales	189	216	.....	537	942
Gambell	151	.....	.....	35	186
Teller	215	270	.....	434	[b]941
Golofnin	132	462	187	383	1,164
Unalakleet	478	.....	233	309	1,020
Eaton	214	189	.....	604	[c]1,008
Bethel	376	391	498	64	1,329
Nulato	100	190	.....	.....	290
Iliamna	438	.....	.....	.....	438
Bettles [d]	400	.....	.....	.....	400
Total	3,073	2,127	1,189	3,817	10,241

[a] 12 of these are sled deer owned by miners.
[b] 22 of these are unidentified.
[c] 1 of these is a sled deer belonging to the superintendent.
[d] *Estimated; no report received.*

TABLE 6.—*Apprentices, with their holdings.*

Station.	When established.	Total deer, 1905.	Apprentices.	Deer owned by apprentices.
Teller	1892	941	5	434
Wales	1894	942	8	537
Golofnin	1896	1,164	12	383
Unalakleet	1897	1,020	8	309
Barrow	1898	629	10	546
Gambell	1900	189	3	35
Bethel	1901	1,329	4	64
Kotzebue	1901	732	4	40
Nulato	1901	290	3	.....
Eaton	1902	1,008	9	604
Kivalina	1905	220	2	220
Deering	1905	479	3	351
Iliamna	1905	438	.....	.....
Bettles	1905	[a] 400	.....	.....
Shishmaref	1905	460	7	294
Total	.....	10,241	78	3,817

[a] Estimated; no complete report received.

From the next table (7), showing the present location of the 3,073 deer belonging to the Government, it appears that two-thirds of the number are under direct Government control and the remaining one-third still in charge of the stations or herders to whom they have been loaned.

TABLE 7.—*Deer belonging to the Government.*

Station.	Loaned.	Under direct control.	Total.
Barrow	.....	83	83
Kotzebue	194	.....	194
Wales	.....	189	189
Gambell	.....	154	154
Teller	.....	215	215
Golofnin	100	32	132
Unalakleet	100	378	478
Eaton	100	114	214
Nulato	100	.....	100
Bethel	376	.....	376
Deering	100	.....	100
Iliamna	.....	438	438
Bettles [a]	.....	400	400
Total	1,070	2,003	3,073

[a] Estimated; no report received.

Table 8 shows the progress made in training male deer to harness. On June 30, 1905, there were 392 deer already trained and 83 under training, a total of 475 deer, or nearly 20 per cent of the entire number of adult male deer (2,584), as shown in Table 3.

TABLE 8.—*Number of trained sled deer.*

Station.	Number trained.	Number in training June 30, 1905.	Total.
Unalakleet	38	15	53
Eaton	32	23	55
Nulato	6	2	8
Kotzebue	40	.....	40
Bethel	62	.....	62
Gambell	20	2	22
Barrow	22	.....	22
Golofnin	52	25	77
Shishmaref	20	.....	20
Wales	41	.....	41
Deering	14	.....	14
Teller	45	16	61
Total	392	83	475

NOTE.—None reported for Kivalina, Iliamna, and Bettles.

By reference to Table 4 it will be seen that in 1905 there were in the employment of the Government at mission stations five Lapland herders, whose salaries were met by loans of reindeer on substantially the same conditions as the loans made to the mission stations. In addition to these five, there was a Lapland herder at Teller, since sent to Tanana, where his salary is met by a loan of deer, and an additional Lapland herder at Nulato in receipt of a salary.

The 78 apprentices enumerated in Table 6 include a number who have completed their five years' period of training, and are proving their trustworthiness and thrift in maintaining independent herds. Under the charge of such graduate apprentices three new stations have been opened during the year here reviewed, forming links in the chains of stations for each 100 miles along mail routes in arctic Alaska.

SUPERINTENDENTS.

For the general supervision of the reindeer stations two superintendents were employed during the year 1905 at an annual salary of $1,500 each. To Mr. W. T. Lopp was assigned the charge of the herds along the shores of the Arctic Ocean and northern Bering Sea, and to C. O. Lind, M. D., the herds on the shores of Golofnin Bay, Norton Sound, and the valleys of the Yukon and Kuskokwim rivers.

MISSION STATIONS.

By far the largest number of stations included in the 15 reported are mission stations that have received loans of small herds of deer for three or five years under agreements already explained.

TABLE 9.—*Total number of deer at the mission stations, 1905.*

Stations.	Adults.			Fawns.	Total.
	Male.	Female.	Total.		
Wales	253	416	669	273	942
Shishmaref	113	208	321	139	460
Deering	106	225	331	148	479
Golofnin Bay	297	511	808	356	1,164
Teller	223	426	649	292	941
Unalakleet (including Eaton)	678	850	1,528	500	2,028
Bethel	280	613	893	436	1,329
Kotzebue	181	315	496	236	732
Kivalina	.....	.....	153	67	220
Nulato	47	147	194	96	290
Total	2,178	3,711	6,042	2,543	8,585

TABLE 10.—*Cost to the Government for reindeer herds at mission stations, 1905.*

Station.	For supplies.	For superintending herd.	
		By annual rental value of deer loaned Lapp teachers.	By cash.
Wales	Nothing.	.....	.....
Shishmaref	Nothing.	.....	.....
Deering	[a] $358.38	.....	$200.00
Golofnin Bay	Nothing.	$600.00	.....
Teller	70.00	.....	250.00
Unalakleet	Nothing.	600.00	.....
Bethel	Nothing.	1,200.00	.....
Kotzebue	Nothing.	600.00	.....
Kivalina	Nothing.	.....	[b] 110.60
Nulato	Nothing.	.....	250.00
Total	428.38	3,000.00	810.60

[a] For one year an allowance for supplies was made to the herders on account of driving the herd from Wales to Deering.
[b] For transferring herd to colony.

ECONOMY IN REINDEER INSTRUCTION.

With respect to economy in reindeer instruction, the experience of the Bureau of Education has thus far been in favor of the mission station rather than the Government herd. The chief expense in the management of the reindeer station is the support of the apprentices, who must be supplied with rations while learning the care of the herd. Inasmuch as some of the older apprentices are married and have families, it has been necessary in some cases to supply with rations not only the apprentice, but also his wife and children.

The missions in providing support for apprentices assume, therefore, the chief expense in the reindeer instruction. Estimating the expense per apprentice at $500 per year—an expense which has to be met in some stations under the Government, and which is liable to be incurred at any time if the superintendent of the herd is not a careful manager, preventing the sharing of rations on the part of the apprentice with his relatives—the 65 apprentices at the missions would cost an annual sum of $32,500. Estimating the expense at missions at one-third of this sum, by reason of the thrift which obliges the Eskimo families to derive most of their support from what is called native

food (whale, walrus, seals, wild birds, and game), the minimum amount contributed to the support of reindeer instruction by the mission stations is something over $10,000 per annum, or two-thirds as much as the Government appropriation of $15,000.

The annual cost to the Government for a mission station comprises the salary of a skilled herder and the annual increase of the loan of 100 deer, equivalent to about 30 fawns, valued at $20 per head. As already explained, at the end of five years it is unnecessary for the Government to supply a chief herder at mission stations, as by that time the apprentices will have learned the art of herding and training for harness, and all expense to the Government in connection with such herds ceases, except what may be necessary for inspection purposes to see that the law is complied with and that female deer are not slaughtered.

The entire cash expenditure by the Government for seven mission stations amounted in 1904 to $2,581.19, and in 1905 to $1,238.98, or an annual average for the two years of $1,910.08.

The reports of the general superintendents and of the local superintendents in charge of the respective stations afford many evidences of the success of the reindeer industry in improving the condition of the natives. Superintendent Lopp gives an account of 21 Eskimos, herders and apprentices, who "own 824 deer, who order their supplies direct from San Francisco, thus avoiding a middleman's profit. They represent all the different factions or clans of the cape village, and, as far as their income allows, are helping their needy relatives. They are better clothed, better fed, and live better and cleaner lives than in former years, and are helping their people along these same lines."

In the endeavor to establish new stations during the year, an expedition from Unalakleet to Bettles, covering a distance of 550 miles, and return was made during the months of November and December, 1904, and January, 1905, under the charge of Carl O. Lind, M. D., supervisor of reindeer in Alaska, central division. His party consisted of 8 men, including 3 Finns and 3 native herders, and it was due to the courage, endurance, and patience of these men that a herd of 300 reindeer was successfully driven through the "scrub" growth of the country in winter, in the face of snowstorms, and a temperature sometimes as low as —41°.

It is noteworthy that the sled deer made the trip of nearly 550 miles back to Nulato, thus completing the total journey of over 1,000 miles.

The success of the introduction of reindeer into Alaska has awakened an interest in Newfoundland, which has control of the coast region of Labrador. The conditions there are the same as those in Alaska. Every year the Eskimos find it harder to obtain their natural food supply, and the country is covered with reindeer moss in abundance.

The Hon. J. J. Woods, postmaster-general of Newfoundland, and Wilfred T. Grenfell, M. D., superintendent of the Royal National Mission to Deep Sea Fishermen, have written to this office inquiring as to the feasibility of introducing domestic reindeer into Newfoundland. It is to be hoped that the experiment will be tried in the near future.

This report completes the series (15 in number) of annual reports on "The Introduction of Domestic Reindeer into Alaska."

TABLE 11.—*Expenditure for reindeer for Alaska, 1905.*

	Amount.
Salaries, 16 employees	$9,716.67
Supplies for stations	5,567.03
Transfer of herds	2,382.96
Purchase of 220 deer, at $25 per head	5,500.00
Freight	171.60
Traveling expenses	1,021.85
Printing report, etc	425.81
Total	24,785.92

COOPERATION OF THE TREASURY DEPARTMENT.

As in former years, the Treasury Department has furnished transportation in Alaskan waters to Mr. William Hamilton, assistant agent of education in Alaska, and to other employees of the Bureau of Education in the discharge of their official duties, and carried the mail to isolated teachers.

For this assistance thanks are due to the Secretary of the Treasury, to Capt. W. G. Ross, Chief of the Revenue-Cutter Service, Capt. Oscar C. Hamlet, commanding, and other officers attached to the revenue cutter *Bear*.

SHELDON JACKSON,
General Agent of Education for Alaska.

The COMMISSIONER OF EDUCATION.

CHAPTER XV.

INAUGURATION OF THE AMERICAN SCHOOL SYSTEM IN PORTO RICO.

By SAMUEL MCCUNE LINDSAY, Ph. D.,

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I. THE EDUCATIONAL PROBLEM AT THE BEGINNING OF AMERICAN OCCUPATION.

On the 25th day of July, 1898, the transports conveying the troops of the United States destined for the conquest of Porto Rico landed and the Army took possession of the town of Guanica on the south coast of the island, and by the 12th of August, when the armistice was declared, one-third of the area of the island had been forcibly occupied by the American troops, with practically no resistance. Everywhere outside of the capital city of San Juan, which was the residence of the few persons in the island of decided Spanish proclivities, this military force was received with open arms as a liberator and a long-expected friend who was to usher in a day of political and religious liberty and new opportunity. The control of the United States became effective on the 18th of October, 1898, and from that date until May 1, 1900, the island was under the military rule of the United States.

The provision for education is a fair index of the civilization of any people. It measures the social value they put on the future and it measures the resources of the present. To understand, however, the educational system and possibilities of a country it is necessary to know something of its general, social. and economic conditions. Briefly, those conditions which confronted

our Government of military occupation were as follows: We had taken possession of an island in the Tropics lying about 18° above the equator, but so situated as to have the benefit of the trade winds for at least ten months of the year, and therefore enjoying a delightful climate, which can best be appreciated by the people of the North when we speak of it as perpetual June as that month is known in the States bordering on the North Atlantic seaboard. The variations in temperature are very slight throughout the year, the average mean daily temperature not varying over 4°. The climate is healthful, and every foot of the soil is practically capable of cultivation. There are no forests in the island. It is almost rectangular in shape, about 100 miles long and 40 miles across, containing an area of about 3,600 square miles. The interior of the island is rugged and mountainous, the mountains attaining an altitude of 4,000 feet, but the roads crossing through the various passages rarely ascend more than 3,000 feet. There are a great many valuable trees in the island, but they are scattered, and, with the exception of the small reservation that has been made for forest purposes by the United States Government, the mountains are cultivated to the very top.

The interests of the island are wholly agricultural, the usual tropical products found being coffee, sugar, tobacco, and small fruits, especially the banana and orange—a very fine variety of which is produced in its wild state, the lime, and the pineapple. These are the chief products in the order named. Formerly this order indicated the value of the products, but since the destructive hurricane of August, 1899, coffee, which still gives employment to the largest number of persons, has fallen to third place; and sugar, which now occupies a commercial advantage by reason of the free trade relations with the United States, which are not enjoyed by the Spanish planters in the other islands of the West Indies, holds the first place in the products of the island. Tobacco, which has also had a boom by reason of American sovereignty, finds a ready market in the United States, while Porto Rican coffee, on the other hand, a high-grade article not appreciated by the American consumer, has its natural market in Europe, where the commercial relations of Spain gave it preference, and those of the United States operate to its disadvantage. There is practically no manufacturing and no fuel on the island, hence manufacturing will necessarily occupy a minor place. There is some water power, which will ultimately be used for the furnishing of light and transportation. There is considerable iron ore, but otherwise little mineral wealth in the island. For a tropical garden, however, the United States could not have selected a more beautiful spot. Nature has been lavish and the productivity of the island is marvelous. Little skill has been devoted to agriculture as yet, and the population for four hundred years has been kept in ignorance through a mistaken economy.

We found in Porto Rico a population of nearly 1,000,000 people, of whom only about one-third were blacks or mulattoes. Little or no race feeling prevailed, and the mulattoes together with the two-thirds white population constituted almost an entire white labor force, giving conditions unlike those in the other islands of the West Indies. The native stock, as it is called, is predominately a mixture of Spanish and Indian blood, and while there are no pure Indians left, the Indian type is still noticeable in many of the children of the island. This population is also more largely a population of young persons than is to be found in any country of the North. The so-called median age line, according to the war census of 1899, was found to be 18.1, while that of the United States was 21.9; that is, in Porto Rico one-half of the population is less than 18.1 *years of age. Nearly 31 per cent* is under 10 years of age, and only 16.5 per *cent is over 40 years of age.* Corresponding figures for the United States

would show a very different age structure. The proportion of the sexes is about normal, in a population of 953,000 there being an excess of 8,700 females. The population of school age is, therefore, very large, and the educational conditions revealed by the census of 1899 showed a deplorable condition of illiteracy. The total number of persons under 5 and over 17 reported as attending school was only 414, and as the period of 5 to 18—i. e., from 5 to 17, inclusive—is the usual one recorded in the United States as the period of school age, we must take the number of persons found in that period as the school population. This in 1899 was 322,393, and the estimated school population for 1904, based on the calculation of the normal increase computed from the censuses of 1883 and 1899, was 393,786. Of the 322,393 persons of school age reported in the census of 1899, 25,798 (or just 8 per cent) were reported as attending school, 15,273 (or 9.3 per cent) of the male population of school age, and 10,525 (or 6.5 per cent) of the female population of school age. This showed that there was less desire to have women educated than men, and that fact is further brought out in the statistics of illiteracy, which were very discouraging even for a tropical country. Of the total population of 10 years of age and over, 22.7 per cent were able to read; of the male population, however, 25.7 per cent and of the female only 19.9 per cent. In Cuba, at the same time, 44.6 per cent of the male population 10 years of age and over were able to read, and 41.7 of the female population; and in the United States 87.6 of the male population and 85.6 of the female population. Going still further, and taking the entire population of Porto Rico, assuming that the children under 10 years of age not in attendance at school are not able to read, and assuming, as the census does, that those under 10 years in attendance at school are able to read and write, we have the following statistics in reply to the census inquiries answered for 951,836 persons out of a total population of 953,243. Five-tenths of 1 per cent had enjoyed the advantages of higher education; 15 per cent were able to read and write; 16.6 per cent were able to read. The percentage of illiteracy for the colored population was a little higher than that for the white, while the proportion of negroes in school was greater than the proportion of whites. This is confirmed by later experience in school administration. I usually found that the negro population was more ambitious than the white population for the advantages of the primary school where these advantages were free for both races.

The physical condition of the population is an important element in estimating the educational problem. On this point there is a vast difference of opinion among those entitled to speak. The notion prevalent in this country that the population is idle, lazy, and diseased is not correct. Certain characteristics of the Tropics are, of course, in evidence. There is what a distinguished Porto Rican has humorously called a "negative inclination to labor," but this phase of tropical life is likely to be exaggerated by the more energetic worker from the North, because he does not understand or sympathize with conditions under which physical labor is performed in the Tropics. I think it is well within the bounds of reason to say that the average Porto Rican peon, or workingman, can and does cheerfully put forth an amount of physical exertion and expends in a day labor which, if measured in units of muscular physical force, would compare favorably with similar grades of labor in the United States. Such effort is not as intelligently expended or directed, and hence is not as productive. The worker has never had the strong incentive that comes from the full enjoyment of a reasonable share in the productivity of his labor; but the peon grasps at education eagerly under the new conditions, doubtless *thinking* that it may relieve him of the disadvantages of his old *position, perhaps* also in many cases associating the idea of relief from phys-

ical toil. But if such education is properly directed, I believe that in the peon's rise is the hope of the future for Porto Rico, and that he will not shun physical toil, but will see in it the basis of greater prosperity and happiness in proportion as his tasks are lightened by intelligent direction, and his returns increased where the rights of free men are defended by those who are intelligent enough to know their rights and to meet their obligations.

Physically, the people of Porto Rico are smaller in stature than those of the United States. They have a high birth rate combined with a high death rate. Moreover, both of these significant indexes of social vitality are higher than the relatively high records reported, by reason of faulty registration of both births and deaths. The census of 1899 states that the true birth rate must be as high as 40 per annum per 1,000 of population, and that the true death rate must be nearly 40. The phenomena underlying both of these indexes are undergoing a great change. The birth rate has not yet shown that it is affected by the recent increased cost of living or by any change in the economic standards of the people, but the death rate has responded in a very marked manner to the improved sanitary conditions since the beginning of the American occupation.

The people are fond of children. A family rejoices in every addition to its numbers, and parents are usually so proud of the number of children they have that in reporting that fact, even to a stranger, they will sometimes include a child whose birth is expected at any time within the next six months. Parental affection, or, more than that, universal affection bestowed upon children is noticeable everywhere.[a] The physical heredity of the present population leaves much to be desired. For a long time Porto Rico was apparently regarded as a penal colony. The evils incident to slavery were there until its abolition in 1873, and then there was a great gulf between the small highly educated and propertied class and the great mass of ignorant tillers of the soil, for whom little was done in the way of sanitation or direction as to wholesome living. Strange as it may seem, however, the relations of the sexes, as clearly shown in the very able reports of General Davis, were no less continent than in most civilized countries. Marriages, it is true, were rare and were deemed unnecessary, and families lived together fulfilling the same obligations and respecting the same rights of individuals as though the marriage tie existed. At least such is the opinion of many observers, and such is the testimony before a committee of the United States Senate from one who was probably the best-informed American who studied the situation at the outset of the American occupation. I am inclined to think that the standards of sexual intercourse have been, however, quite different from what this statement would lead us to expect. I do not believe that there was more prostitution or illegitimacy, as we use these terms, than would be found among the social population of our large cities; but the conditions of family living were such, and are such to-day, that in addition to the somewhat laxer views prevalent in tropical countries, there is probably a greater amount of incest and of sexual excesses that have a marked effect upon the physical vitality of the children. An unusually large percentage of the children presented for enrollment in the public schools have shown signs of syphilitic affection in some form. The anæmic condition of so large a portion of the population, especially noticed in the case of children, has recently been shown to be a preventable disease, and the progress of public sanitation may soon cure that abnormality, as it has done away with many of the diseases, such as yellow fever and smallpox, which formerly worked such havoc in the island.

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[a] *For fuller information on child life in Porto Rico, see an article by the writer in the Sunday School Times, 1902.*

The material basis of the educational problem will probably be sufficiently understood from what has just been said, and to get clearly before us the situation presented to the American military authorities upon their arrival we must now ask the question, What had Spain done in the direction of education? The statistics of schools as reported by the Spanish authorities showed that on June 30, 1898, only a few months before the American occupation, there were 380 public schools for boys, 148 public schools for girls, and 1 public school for adults, with a total enrollment of 25,644 pupils, of whom 18,243 were said to be in attendance. There were also reported 26 private schools, with an annual attendance of 980 pupils, at this same period. The total amount expended upon these schools by the Government was 309,810 pesos, or about $180,000, of which sum 234,000 pesos were for the salaries of teachers, which were usually in arrears; 54,000 pesos were for the rent of buildings, 11,000 for school books, 4,000 for industrial instruction, 3,600 for prizes, and about 1,800 pesos subsidy for private schools for salaries and supplies. It is impossible by analyzing these figure to realize what they really mean, and a few facts may be stated without any desire to belittle what was done, but solely with a view to estimating this work at its true social value. No buildings had been constructed specifically for school purposes. Most of the schools were held in private houses occupied by the teacher, who devoted one room, of such space as he deemed necessary for the purpose, to holding his school or class. Only one public building devoted to school use was owned by the public authorities, and that was a fine residence in the town of San German, which had been donated by a wealthy citizen of the municipality and had been converted into a very good school building, and as such is still in use. The salaries of teachers were paid by the local authorities, usually after all other obligations had been met, and frequently the attempt to pay was not made until the treasury had become empty. "As poor as a teacher" was, proverbially, the Porto Rican equivalent for "As poor as a church mouse." The supplies were purchased by each individual teacher, and there was no necessary uniformity in the text-books used. The teachers were permitted to charge for instruction what the "traffic would bear," and some pupils paid a regular fee, while others received instruction free. There was little or no supervision—only two supervisors for the island—and little is known of the grade of work done or the relative labor spent upon free pupils and pay pupils except that there was an entire lack of uniformity. The village priest was apt to be the most interested member of the local school board, and in some districts where he was an educated man, with some earnestness of purpose, the work done in the schools was much superior to that elsewhere in the island.

A brief account of the Spanish school system, prepared by a highly educated and refined Porto Rican gentleman who has been connected with the administration of schools during nearly the entire period of American occupation and for many years prior to that, has been published as Part II of a Report on Education in Porto Rico, under date of January 2, 1900.[a] The condition of the teachers in the schools will be commented upon in another section of this paper, but may also be considered in this connection. Of the schools themselves, however, Mr. Hernandez says:

It is seen that public instruction was in the same position in Porto Rico when Spanish sovereignty ceased that it had been eighteen years ago when the organic decree of 1880 went into effect. The large number of schools and the large attendance of pupils indicated in the statistics signified little when the organ-

[a] See report by Enrique C. Hernandez, secretary of the insular board of education. Part II of Senate Document No. 363, Fifty-sixth Congress, first session. Washington, 1900.

ization of the schools and methods of instruction were completely neglected. There were no provisions made for school buildings or for any of the aids necessary to effective instruction. Admission to the public schools, while open to both sexes of the town, was only granted to boys in the country. Coeducation was regarded as a very dangerous experiment, as there were no rural schools for girls the latter did not participate in the benefits of education.

The schools that were found at the beginning of the American occupation were chiefly of primary grade. The principal subjects required to be taught were (1) Christian doctrine and elements of sacred history; (2) reading; (3) writing; (4) elements of Spanish grammar; (5) elements of arithmetic, with the legal weights and measures of money; (6) the merest elements of geography; (7) an elementary outline of agriculture, industry, and commerce. Secondary instruction was provided for in one or two towns only, and included additional subjects. Little or no attempt was made to train teachers for their work, and the result was that the burden of instruction consisted of didactic instruction in the catechism, supervised by the village priest, to whom the teacher looked for direction and inspiration as he would to-day to the school superintendent. The rural schools were in session from 10 a. m. to 3 p. m., "in order that the poor children may be at liberty out of school hours to assist their parents in domestic duties and field labors."

I can scarcely do better in the attempt to give an idea of the condition of the schools as found at the beginning of the American occupation than to quote the words of Mr. Enrique Landron, for many years a Porto Rican teacher, both under the Spanish and American régime, and later a principal of a graded school in San Juan and now for some time a district superintendent of schools. He says:

All the public schools in Porto Rico under the Spanish Government were divided into four classes—rurals, auxiliaries, elementary, and superiors. Teachers holding rural certificates were generally in charge of rural schools, and teachers holding auxiliary, elementary, and superior certificates were in charge of auxiliary, elementary, and superior schools, respectively. In the auxiliary and rural schools the following subjects were taught: Reading, writing, elements of arithmetic, catechism, and the merest elements of Spanish grammar. These subjects and an elementary outline of Spanish history, agriculture, industry, and commerce, sacred history, and elements of geography were taught in the elementary schools, while the superior teachers had to teach all these subjects more extensively and also some elements of geometry, surveying, lineal drawing, physics, and natural history.

In the course of study the teacher was permitted to introduce such changes as he deemed necessary for the interests of the school. There was no grading of the schools. Every teacher classified his pupils according to his own ideas, although generally the pupils in the schools were divided into four classes, which were called "primera, segunda, tercera, y cuarta clase," the first one being the most advanced. Generally the pupils in the first and second classes only were taught by the teacher himself, the other classes being in charge of the most advanced pupils, who acted as assistants to the teacher.

As to the method of teaching, the pupil had to learn by heart the lessons in the text-books. These text-books were written in the old way of questions and answers. The pupil had to learn daily a certain number of questions. At the time of the recitation the teacher would read out the questions to the pupil, who in turn would answer the same *ad pedem literæ*. The pupils had to learn their lessons at home. A few minutes were granted them before the recitation to read over the answers they had to recite that day. The highest mark was given to the pupil who recited the lesson without omitting any of the words. Besides these recitations the teachers were supposed to give some oral explanation in grammar, arithmetic, and catechism. Object lessons were entirely unknown.

As to discipline, if there was any, it was very bad. An unbearable noise was *heard continuously* in the school. Corporal punishment, abnormal positions, *and detention after school* were the most common punishments used.

The classes lasted six hours a day, except in the rural schools, where they lasted only five hours. In the month of June, after the examinations, also in the month of December, the schools were closed for fifteen days; also all of holy week, and during the year on many other church holidays.

The salaries of the teachers were as follows: Rural teachers, $300 per year; auxiliary teachers, $360 per year; teachers in second-class elementary schools, $540 in San Juan, Ponce, and Mayaguez, and $480 in other towns; teachers in first-class elementary schools, $720 in San Juan, Ponce, and Mayaguez, and $600 in other towns; superior teachers, from $1,200 to $1,000 per year. In the small towns, as Vega Alta, for instance, the school was called a second-class school, and in the large towns, like Bayamon, a first-class school. The teacher in charge of the superior school of San Juan had a salary of $100 per month, while the teacher of Arecibo had only $80 per month. The ayuntamientos were supposed to pay the rent of the schoolhouses and the salaries of teachers. They were also to provide all materials for the schools. The teacher and his family generally lived in the schoolhouse. The school was free only for poor children. Other pupils had to pay a monthly fee to the teacher. In the larger towns the public schools were usually attended only by the poor children; the others attended private schools.

One of the duties of the school board was to supervise the schools. Of the members of the board, the alcalde and the parish priest were the only ones who visited the schools, and at the end of the school year a committee of the board presided at the general examination. For the purpose of supervising the schools of the island, the island was divided into two districts—the northern district and the southern district—and one supervisor was appointed for each district. They had to visit the schools of their respective districts once a year and report on their condition to the "comisión provincial."

The teachers obtained their schools through a competitive examination before an examining board appointed by the governor. In this way the teacher obtained his school for life. He was the proprietor of his school, and it could be taken away from him only through special legal proceedings. Teachers were promoted according to the length of public service. At the time of the establishment of the autonomous government the former "junta superior de instrucción pública" was abolished. In the year 1898 there were 500 public schools in operation in Porto Rico. These schools were attended by some 22,000 children. Coeducation did not exist, as the Government thought it to be a very dangerous system.

In fact, it can be said that there was no real organization in the public schools of Porto Rico; every teacher being the ruler of his own school.

II. THE PERIOD OF MILITARY GOVERNMENT.

The history of this period, including some account of the school system, will be found voluminously recorded in General Davis's report as military governor of Porto Rico.[a] The statistics therein contained for the years preceding the American military occupation are very meager. Little could be done during the school year 1898–99, already begun under the disorganized conditions of the war period, except take account of stock. This the military authorities attempted to do. Both General Davis and the members of the commission sent to the island by the Secretary of War to report upon all matters relating to currency, taxation, judicial system, education, and civil affairs generally, which visited the island in the spring of 1899, were agreed upon the educational problem confronting the military authorities and the policy to be pursued. "Not one out of every ten of the children of school age," says the commission, "attends a school of any kind. The children are bright, and with the same

[a] See Report of the War Department for the fiscal year ended June 30, 1900, Part 13; Report of the Military Governor of Porto Rico on Civil Affairs, chapter 11, Washington, 1902; also, Report of United States Insular Commission to the Secretary of War, June 9, 1899; also, the very interesting and comprehensive report of Dr. Victor S. Clark, president of the insular board of education, for the year ending December 31, 1899, Senate Document 863, Fifty-sixth Congress, first session, Washington, 1900.

opportunities afforded the children of the United States the children of Porto Rico would quickly become as intelligent." The commission goes on to say:

The schools we visited are simply pretensions to education, and in the United States would not be regarded as being worthy of the name. The miserable hovels into which these schools are crowded, the unwholesome and unhealthy conditions surrounding them, the lack of the smallest conveniences, and the entire absence of a good system of school books are noticeable everywhere. In but a single school did we find any pretensions to desks, and in most of them the plainest and roughest benches, upon which the children were compelled to sit. No attempt has been made at classification, and young and old are gathered together into one common conglomeration of filth and dirt. The books most generally found in these schools are a primer, a catechism, and a mental philosophy, and the system of education consists almost entirely of memorizing alone. In special instances we found a grammar and an arithmetic and a Spanish history, according as the teacher himself had some special qualification which he put into use.

The only schools commented on favorably were two, one a charity school for orphans under charge of the nuns of the Catholic Church, but supported by public funds, and the other located in a public building and conducted by the nuns of the Sacred Heart. The institute and normal school at San Juan had a pretentious programme, with 17 professors drawing $45,000 in salaries per annum; but of this school the commission said: "We visited the schools of this institute and found within them principally children of public school age, all of whom should have been attending the public schools, and we failed to find at any of our visits a single one of the high-salaried and distinguished professors." The fact is that these positions were given as rewards for public or political service to highly distinguished and educated men, of whom occasional lectures of a semipopular character were required. No intensive work or well-developed educational programme was carried out. The lack of suitable training for the position of public school teacher was woefully apparent. Most of the teachers held their schools under a system of proprietary tenure; they were primarily politicians and officeholders, and incidentally taught schools. Their status was supposed to be fixed for life, with no hope for promotion nor fear of dismissal, and hence no incentive to self-development. Frequently a teacher hired a substitute at half his salary, and sometimes absented himself for long periods from school. Most of the teachers were men, and received their appointments from the governor-general, although their salaries were charged against the municipalities, which were usually tardy in their payments and sometimes years in arrears. The privilege of collecting tuition fees from the children of well-to-do parents, the net return from which amounted in some cases to as much as the salary and in the rural schools was estimated to be worth 15 per cent of the salary, constituted the inducement to hold on. Instruction was devoted largely to religious matters, and the time of girls given over to fancy needlework. "Many of the rural schools," said General Davis, "were nothing better than poorly conducted nurseries for children of all ages." The acting director of public instruction, speaking of visits made to the schools soon after the introduction of military government, says:

We visited school during school hours and found the teacher in bed taking a siesta; other teachers were away tending store. In another case we found a teacher who was running a rumshop. Teachers went around the schoolroom in untidy and insufficient attire, and the demand of the neighborhood callers upon the time of the teacher left him less than the required time for instructing the pupils.

Less than 6 per cent of the school population attended school.

The demands upon the military government were urgent in many directions, *but it took hold of the* problem of the schools and that of sanitation with *exceptional vigor.* Military inspectors were sent into all the districts, and the

teachers were given to understand that they would hold their positions and receive their salaries promptly as long as they attended to their duties faithfully and to the best of their ability and no longer. The whole tone of the service was at once improved. In January, 1899, Gen. John Eaton, LL. D., of Washington, D. C., was called to Porto Rico to take charge of educational matters, first as superintendent of schools, later as director of public instruction, and finally as chief of the bureau of education in the department of the interior, to which the schools were assigned. General Eaton had for his assistant Mr. Victor S. Clark, who succeeded him as head of the department in May, 1899, when General Eaton was forced to return to the States by reason of ill health. In March, 1899, 16 English supervisors were appointed and vested with various administrative duties, including the payment of teachers, accountability for schoolbooks and supplies, and the selection of school buildings. All were familiar with the American school system and were Americans or of American and English parentage. Ten of them were college graduates, two normal school graduates, and four graduates of high schools or public schools of standing.

A beginning in the formation of a school law based upon the American public school system was made during the months of April and May, 1899, under the direction of Doctor Eaton, and promulgated in a series of military orders. These required many radical changes, among them being a regulation that the schoolhouse shall be entirely separate and upon different premises from the residence of the teacher or of any other private family. Four years later it was my privilege to carry this essential provision a step further by securing in the school law passed by the insular legislature a regulation that the schoolhouse must also be separate from any place of business. The military orders required that where a district provided but one school such school should be open to both sexes. This was the beginning of coeducation, to which no one henceforth made any objection. The school law now provides that all schools shall be open to boys and girls alike, except that in towns where two school buildings are located less than half a mile apart the local school board may rule that one building shall be devoted exclusively to boys and the other to girls, but no board has availed itself of this permission.

The military orders also abolished the fee system and made the schools absolutely free to all residents of Porto Rico between the ages of 6 and 18; fixed the school year at nine months of twenty days each; established a graded system for schools in towns; limited the number of pupils for each teacher to 50; provided a principal where four schools are grouped together; changed the course of study by eliminating the study of church doctrine and religion and inserting Spanish, English, arithmetic, geography, United States history, and civil government, with music and manual training as minor subjects where teachers were competent to instruct in them; fixed the legal qualifications and salaries of teachers on a uniform basis for equal work, and required uniformity of instruction for the various classes of schools.

In July, 1899, a board of education was established, not merely as an advisory body, but as the central organizing and administrative power in educational matters. Both Americans and Porto Ricans were represented on the board, and under its direction the first and last school year (that of 1899–1900) under the military government was begun. The board does not seem to have worked well; probably the difference in ideas presented insurmountable barriers to that strong, cooperative work between Americans and Porto Ricans that was necessary to the successful operation of an American school system. Doctor Clark resigned as president of the board on March 11, 1900, and was

succeeded by Dr. George G. Groff, a member of the board, who served until the advent of civil government, May 1, 1900. The enrollment of pupils during this school year and the cost of administration may be summarized as follows: The number of schools open varied from 529 on November 1, 1899, to 587 on April 30, 1900, the latter being the maximum number for the year 1899–1900. The maximum number of pupils enrolled during the year 1899–1900 was 28,959 and the maximum attendance 20,103. General Davis reports the attendance on private schools as amounting to only a few hundred, and not worthy of consideration. He also tells us that 5,000 children were refused admission for lack of room in the public schools, and that 15,496 of those enrolled were doing the work of the first primary grade, that 3,000 received all of their instruction under American teachers, and that 8,000 received English instruction from English-speaking teachers.

Preparations were also made during this school year for the construction of a suitable normal school building for the training of teachers, which was to be located some miles from the capital city. The English supervisor in San Juan established a model and training school, which, in January, 1900, was housed in the first schoolhouse ever erected in Porto Rico, a wooden structure located just outside the city wall on the military road leading out of San Juan. This building was burned down during the summer of 1900. No well-devised system of centralization in the financial support of the schools seems to have been put in operation under the military government, although General Davis recommended this and asked Congress to appropriate $1,000,000 a year for ten years for the support of education, and, in addition to this, the expenditure of $1,500,000 at once for the erection of schoolhouses.[a]

The actual expenditure under the military government for public instruction during the year 1899–1900, or rather from July 1, 1899, to April 30, 1900, amounted to $212,485.92, and that of the municipalities in addition thereto to $30,693.66. The original appropriations were somewhat larger, but had to be reduced by reason of the lack of resources, and the actual expenditures were well within the amounts after the reduction had been made. The per capita cost was high, but the difficulties of the situation which confronted the military authorities were proportionately great, and the results were somewhat discouraging. No great enthusiasm for the schools was shown in that early period, because the educated class was indifferent to everything done by Americans and the uneducated peon class was not yet fully convinced of the realities of the changes going on about them or the possibilities of education as a lever in their own advancement. The peon was very largely without ambition, and it required a more highly centralized system to place an efficient school before him in the light of a real opportunity. The reports of General Davis, which I have examined with great care and parts of which I have reread many times, contain the results of probably the keenest and most far-reaching study that has been made by any American official of Porto Rican problems as a whole. I hesitate to disagree with his conclusions in any particular, and yet I believe that a careful and conservative estimate of the results of five years of civil government completely refute the pessimistic conclusions, I may almost say predictions, contained in his final report as military governor, in which he says (pp. 133–134):

The census of 1899 indicates that over one-third of the population of Porto Rico consists of children between 5 and 17 years. In other words, there are over 322,000 children of school age. Heretofore 94 per cent of the children attending school have been between the ages of 5 and 14 years. There are over

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[a] *See testimony of* General Davis in hearings before Committee on Pacific Islands and *Porto Rico of the United States* Senate, on Senate bill 2264, pp. 64 ff. Washington, 1900.

266,000 between these ages. The present school laws provide for one teacher to each 50 pupils. This would mean that to afford school accommodation to all children of school age in Porto Rico there would have to be about 6,400 teachers, while to provide only for the children between the ages in which attendance is most common would require about 5,300 teachers. Take 6,000 and 5,000 as the respective numbers, and assuming the salary of each teacher the lowest salary paid any teacher in 1900 ($270 for school year), we have, respectively, for salary lists alone, $1,620,000 and $1,431,000. It needs no argument to convince anyone at all familiar with economic conditions in Porto Rico that the maintenance of an educational system on any such plan as this will be out of the question for years to come unless Federal aid be extended on a large scale, a rather improbable contingency.

As to the advisability of the immediate expansion of the system of public instruction to such an extent as to offer educational advantages to the entire school population of Porto Rico, the following, written by the author of this report in February, 1900, after nearly a year's study of the question, expresses the views then and now held by him:

"If to-day the means were at hand for supporting the 6,000 schools which would be required to accommodate all the children, and if suitable schoolrooms with necessary equipment existed, I am of the opinion that the attendance would be meager and the result unsatisfactory. The anæmic, half-starved, and often naked children would not or could not attend. But supposing the attendance was full and universal, would the result be satisfactory? Would any solid advantage to society and to the pupils themselves result from the instruction? For six or more hours each day they would be under the control of their instructors, and then they would return to their homes of squalor and filth, indecency and vice, their parents indifferent or unable to satisfy the natural cravings of hunger, and what the children had learned would make them unhappy and discontented. They would learn of wants that could not be supplied, and their miserable surroundings would have added horrors. * * *

"After most careful consideration of the question presented, and basing my opinion on the existing conditions, I am forced to be convinced that the true and wisest policy will be at first to direct the principal efforts to educate and elevate the youth of Porto Rico in those centers of population where there is a state of living and existing social, industrial, and economic conditions that would justify the confident belief, not only that the efforts will be supported by public opinion, but that standards and models would be established and copied throughout the island in the rural districts."

It is difficult for a resident of the United States to understand the indifference in regard to schools that is manifested by the people of Porto Rico as a whole. The population consists of two classes—one a small element possessing considerable wealth, the other a considerable mass of ignorant people in abject poverty. Between these two classes there has always been a great gulf of separation, social as well as economical, and this fact has had an important influence on attempts at educational progress in Porto Rico. Eliminating a very few farsighted and public-spirited men, it is a well-known fact that the wealthy class have never favored general education or the establishment of a good system of public schools. The reasons for this are not hard to find. Among them may be mentioned the realization that any direct tax for educational purposes must ultimately be collected from them; the fear of loss of social and financial prestige should education become general; the reluctance to have their children attend the same school as the children of their laborers, and probably most powerful of all, the idea, latent throughout a very large part of the world, that the education of the masses is generally undesirable, if not dangerous. The existence of this idea was at the bottom of a large part of the passive opposition and obstruction that nullified the decree of General Messina and made that of General Despujol ineffective. Later, during the military government, it made itself felt in many ways, especially in the passive resistance, or apathy, or neglect that characterized the local school boards. Wherever any essential link of the chain of acts necessary to open and support a school was under the control of a local board, the school was more or less of a failure. If the board supplied buildings, the buildings were not suitable and were not ready on time. If it elected the teacher, political animosities and local prejudices often led to nonappointment or to frequent changes and poor attendance when the school was opened. If the municipality was supposed to provide furniture, paper, and text-books, these were not forthcoming. To assure the opening of public schools on time, and with proper facilities, it was

found that the control must lie in a central department responsible to the governor himself.

Lack of school funds, lack of a school plant, the want of a sufficient number of efficient teachers—these are the great material obstacles that confront the educator in Porto Rico to-day. His task will be made harder by race and caste antagonism, by political prejudices, by the inability of parents to properly feed and clothe their children, by the deep-rooted aversion to coeducation of the sexes, and by the confusion of tongues.

These difficulties can ultimately be evaded or overcome; but that any substantial good to Porto Rico may result they must, in the opinion of the writer, be surmounted not merely through the expenditure of money and energy, but through the gradual working of a leaven that will require many years to appreciably affect the entire mass. The development of an educational system, to be of real value, must be based upon the desire of the people for broader advantages and upon the sacrifices that they are willing to make to that end.

Porto Rico may be dotted over with well-equipped schoolhouses and plentifully supplied with efficient teachers, but until education comes to occupy in the public mind a more important place than petty jealousies or political animosities; until the wealthier classes are willing to cooperate in the effort to raise up the 800,000 illiterates by whom they are surrounded, and the latter can be awakened to the fact of their own ignorance and a desire to advance; in short, until the stimulus from without that now maintains any usefulness in the school system can be replaced by a force acting from within, attempts at anything like universal education in Porto Rico must be unsatisfactory and the expenditure connected therewith be largely wasted.

Those words were written five years ago. The change in public sentiment within that period has been remarkable. To-day no one could speak of indifference to the schools on the part of the Porto Rican population as a whole, because there is absolutely none. A good beginning in the programme outlined by General Davis has already been made, and the result will be discussed in another section of this paper.

III. THE ADVENT OF CIVIL GOVERNMENT.

The temporary character of the military government, so recognized from the start, made it difficult for it to do more than it did do in the matter of education, namely, inspect and modify slightly in the direction of Americanizing the schools that were found in the island and instill a spirit of security and respect for authority in the minds of the teachers and officials who administered them. Plans based upon the results of such experience as the military officials obtained led to suggestions, and many of them very pertinent suggestions, concerning the school system of the future, but the lack of the necessary authority to devise ways and means for the support of the schools and the uncertain attitude of the United States Government on the question of Federal aid to such a project caused further development to be held in abeyance until Congress established civil government.

Civil government was ushered in with some pomp and ceremony on the 1st of May, 1900, and the task of reorganization along lines of permanence and development in harmony with the fundamental law enacted by Congress for the island, known as the Foraker law or organic act, was begun energetically and prosecuted vigorously in all the departments of government, and not least in that of education. The organic act made the department of education a department coordinate with that of state, treasury, interior, and judiciary, and centralized all power in the hands of a commissioner of education. Under the Government of Spain teachers had been appointed in the schools practically at the dictation of the governor-general and their salaries paid by the central or insular government, while the municipalities paid only such local expenses as the rent of buildings, wages of janitors, and purchase of minor supplies. *Doctor Groff*, who was president of the insular board of education

for the last two months of military government, was made acting commissioner of education under the civil government and served in that capacity until August 6, when the new commissioner, Dr. Martin G. Brumbaugh, took charge of the department. After a brief survey of the field the new commissioner decided that the school law in operation under military orders was entirely unsuited to the conditions of a progressive development along American lines and set about the task of formulating a new and comprehensive law, and presented it to the insular legislature at its first session in January, 1901. In the meantime preparations had to be made for the opening of the schools for the first academic year under civil government, that of 1900–1901. A new department had to be organized, as a destructive fire had destroyed not only the model training school, the first school building erected since the beginning of American occupation, but also the offices and records of the department of education, which were housed in that building. The new department was organized, regulations adopted, teachers engaged, buildings rented and equipped, and about 800 teachers with 38,000 pupils were put at work before the end of the first month (October) of the new school year.

The statistics for the entire year showed that the total number of teachers employed during the year was 812, with an average number of schools open each month of 698, and an average number of pupils enrolled each month during the year of 31,172. When these figures are compared with the preceding year's statistics for the first term, which are given by Doctor Clark, as follows: Number of teachers employed 582, total enrollment 24,694,[a] it will be seen that a new era of progress had already begun. With the adoption of a new school law by a legislature made up in its lower house of representatives elected by the people, which unanimously passed a comprehensive school law January 3, 1901, and with an insular appropriation for schools at least 25 per cent larger than for the previous year, and with the beginning already made in the construction of schoolhouses on a large scale (by the use of funds made available through the generosity of the Federal Government of the United States in returning to the island about $2,000,000 collected in customs receipts on Porto Rican products sent to the United States), a new enthusiasm for education made itself felt among the people. That inner force, of which General Davis spoke, began to assert itself. It has grown steadily and continuously from the beginning of civil government until the present day. The results of this continuous development will be estimated in another section of this paper. Many changes have taken place in the educational laws and in their administration, as new experience has dictated wise modification, but throughout there has been a continuous and uninterrupted development. The unsettled and somewhat chaotic conditions which characterized the several changes in policy from the breaking up of the Spanish régime until the beginning of civil government, have not prevailed at any time since that beginning was made. Doctor Brumbaugh served from August 6, 1900, until February 8, 1902, at which time the present writer qualified as commissioner, and remained in charge of the department until October 1, 1904, when the present commissioner, Dr. Roland P. Falkner, qualified. These successive changes have not interrupted the continuous and progressive development of the school system, although emphasis perhaps has been laid by the different commissioners upon quite different departments of the school work.

It is now necessary to examine somewhat more in detail the various types or kinds of schools organized to meet the educational needs of the island. In all

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[a] See p. 40, Report of President of the Board of Education. Senate Document 393, Fifty-sixth Congress, first session. Washington, 1900.

of the newer rural schools, where buildings have been constructed, the department has carefully arranged to have at least an acre of ground surrounding the school, which can be used as a garden for purposes of instruction in elementary agriculture. In some rural schools such instruction is now given with considerable success, and in a few cases it has been given by a visiting teacher of agriculture, who took charge of the work for a half day twice each week, and whose work was followed up by the regular teacher in charge of the school. The importance of agriculture in a country whose destiny undoubtedly makes agriculture its chief resource for all time to come can not be overestimated. The schools must find a way of training the country boy and the country girl for greater efficiency in this direction, and of correlating the experiences of their brief school life with the things to which they must devote their attention in after years. More will be said on this point in discussing the present plans of the agricultural department of the University of Porto Rico, which aims to train special teachers for this work. It is worthy of note, however, that where well-trained teachers have undertaken it in the very lowest grades of the primary school and in the most unpromising ungraded rural schools, considerable success in agricultural work, as a part of the rural school programme, has already been attained.

IV. THE PRIMARY SCHOOLS.

The age structure of the population; the peculiar conditions of a tropical climate, producing somewhat more rapid growth in the earlier years, and the fact that so few school facilities were enjoyed by the people made it necessary to put the entire emphasis at the outset on the development of the primary school. Doctor Clark estimated that during the period of military government over 15,000 children who entered the schools, and constituted more than one-half of their total enrollment, did not know how to read or write, and that 96 per cent of the total enrollment belonged in the lowest three grades. Doctor Brumbaugh makes no estimates on this point; but in my report for 1903 I had a careful estimate made, and found that it was the opinion of school superintendents and teachers in a position to observe the results of our grading that less than 25 per cent of the pupils in the town schools were to be found above the fifth grade and less than 25 per cent of the pupils in the rural schools were to be found above the third grade. The primary school therefore, as the beginning of a graded school in the towns and as a rural school in the country districts, became the chief object of our planning. In a few of the large towns an attempt was made to establish kindergartens to take children at the age of 4, and in a few other cases the first grade of the primary school did some kindergarten work, although not regularly equipped as a kindergarten. The people were very much interested in this form of education and were desirous of having it conducted on a larger scale, but it had to be curtailed rather than expanded because of the greater demand for the opening of first-grade schools, two of which could usually be established for what one well-equipped kindergarten school would cost. I may say that throughout this discussion I shall use, except where otherwise noted, the term "school" to mean a teacher and a class. A large school building in one of the cities may have eight or more teachers and classes, and if so, it would be recorded in our statistics as eight schools.

A different course of study was laid down for those primary schools in towns where they were all graded. This course has been modified many times, always in the direction of simplification. At the outset it was deemed best *not to specify particular* text-books or the exact ground to be covered in

specified text-books, because of the traditional habit of the Porto Rican teachers to confine themselves exclusively to the text and to depend upon memorizing. It was desired to put the teacher somewhat upon his own resources, to suggest topics to be covered, but leaving to the superintendent or principal and teacher to work out together the details of the school programme. The rural school-teacher was instructed to divide his pupils into as many groups as necessary, devoting his chief attention to the largest group, and following as nearly as possible the course of study of the graded schools in assigning work to the various groups. Usually the rural school was divided into two or three groups, and the method pursued was largely experimental. It worked well only where superintendents were able to give considerable assistance to their rural teachers and where the rural teacher himself possessed some adaptability and ingenuity. This means that it did not work well in most cases. In some districts the superintendents prepared what constituted practically a separate course of study for rural schools, and, through district conferences, that plan has spread over the island—the superintendents borrowing from each other the results of varied experiences—and finally the department has prepared a special course of study for rural schools. The courses laid down for the town graded schools are given in full in the next section.

The progressive development of the schools, chiefly of primary grade, both rural and graded, may be approximately gauged by the following statistical statement:

Year.	Total population.	School population 5 to 17 years, inclusive.	Number of teachers.	Total enrollment.	Average daily attendance.	Number of schools.	Number of American teachers.[a]
1864	619,525	.....	122	3,488	.....	.....	.....
1880	754,313	.....	432	15,318	.....	.....	.....
1898–99	857,660	.....	525	25,615	.....	.....	.....
1899–1900 (first term)	957,779	.....	582	29,182	21,873	.....	.....
1900–1901	[b]953,243	[b]322,366	812	33,802	23,452	696	104
1901–2	[b]953,243	[b]322,366	968	61,868	30,160	857	102
1902–3	[c]1,000,907	[c]377,200	1,097	[d]70,216	34,272	965	136
1903–4	[e]1,012,775	[c]393,736	1,204	[e]61,168	41,798	1,073	139

[a] In addition to number of teachers given in previous column; some give secondary instruction.
[b] Official census of 1899.
[c] Estimated increase based on official figures of census of 1883 and 1899.
[d] Includes 6,177 pupils in special schools, some of whom receive secondary instruction.
[e] Includes 3,485 pupils in special schools, some of whom receive secondary instruction. Decrease from preceding year more apparent than real, due to change in term records.

V. TOWN GRADED SCHOOLS.

The island is divided into 66 municipalities and (at present, June, 1905) 19 school districts. In each of the municipalities there is usually one town of sufficient size to support two or more schools, and in such case these schools are graded or are required to follow the following course of study, which has been gradually evolved and subjected to many different modifications:

COURSE OF STUDY.—OUTLINE OF EIGHT YEARS' WORK IN EIGHT GRADES.

SUBJECTS.

I. Language: (*a*) Reading, (*b*) writing, (*c*) composition and spelling, (*d*) memory work. All language work to be given in both Spanish and English.
II. Number work.
III. Nature study and elementary science.
IV. History and biography.
V. Art.

FIRST GRADE.

I. (*a*) Words and sentences from blackboard. Sentences from chart and reader with definite drill in phonetic elements and words. Reading from chart and primer, with frequent changes in text, using at least three different sets of readers. Insisting upon a clear understanding of the thought, which means a comprehension of the meaning of the word and its relations, before the sentense is read. Attention to bodily conditions in reading—pose, voice, etc.—and to pronunciation, articulation, and inflection.

(*b*) Copying words from blackboard and from slips provided. Here forms, single letters, and letters combined in words insisted upon, following the vertical or medial slant system, using no ink, writing with pencil on paper rather than on slate.

(*c*) Oral telling of stories by the teacher, to be repeated by the child. Reading of stories to the children, to be repeated by the child orally. Copying words and sentences. Writing of simple words from dictation. Teaching pupils to write their name, and to use the simple punctuation marks and capital letters, noting especially the correct orthography of each word, but not teaching spelling as a separate class exercise. Allow the child great freedom in the expression of its own thought.

(*d*) Memorizing and reciting short, simple literary quotations, at least two lines a day, teaching the entire piece as a rule. Select the best things from the reading books furnished.

II. Combinations of numbers to 10, using concrete objects; teaching orally. Begin simple fractional elements, as one-half, one-fourth, one-third, etc., putting these simple numeral elements before the child's eye in figures gradually, and complete the number concept in each case with appropriate oral stories, allowing the child himself to form the stories, if possible, and perform the operation in the concrete as the story progresses. Gradually lessen the use of objects, teaching the child early to think of the number independent of the things. Teach simple relative values of pint, quart, inch, yard, penny, dime, etc. Compare various objects as to size, developing concept of surface and content. Give abundant drill and ample illustration.

III. Recognition of common plants, trees, their uses, their relation to man. Recognition of common animals, their uses and relation to man. Recognition of common rocks, their uses and relation to man. Hints as to their distribution. Simple elements of hygiene, as care of the teeth, hair, eyes, face. Hygienic conditions in general. Suitable stories and selections illustrative of travel. The habits and haunts of birds, animals, fishes, etc. Descriptions of scenery and such other matters as will lay the foundation for an appreciation of nature. Familiarity with the four cardinal points of the compass, and ideas of location.

IV. Selected stories suited to the capacity of the child and to the season, making it subordinate to Group III, including fairy stories and such general bits of historic incident as relate to historic characters.

V. Free-hand drawing work from memory and imagination. Paper folding, rote songs, breathing and exercises; study of pictures, using results in language; drill in blackboard drawing, and drawing from nature study, using colored crayons, with such additional elements as the teacher of drawing may order.

SECOND GRADE.

I. (*a*) Readings from several first readers. Phonetic drill continued. Introduction of second reader as early as possible in the year. Abundant reading at sight.

(*b*) Copy and writing from dictation. Practice upon forms of single letters. Copying from dictation with pen and ink.

(*c*) Reproduction exercises. Drill on common abbreviations, punctuation, and capitalization. Spelling of words having the same sound and different orthography, or different sound and the same orthography.

(*d*) Memory work reviewed and continued. Selections from the readers in use.

II. Numbers from 1 to 50, developing multiplication tables and simple elements of partition and division. Application of weights and measures. Simple fractional parts. Considerable oral work and daily exercises in mental arithmetic.

III. Observations of habits of animals. Development of plant from seed to *fruit. Growing plants, if possible,* in the room. Observe each stage of their

development. Useful animal productions, especially parts used for food and clothing. Use of seeds to man. Forms of water. Direction and distance of winds. Judgment of distance. Knowledge of local food and animal products. Continuation of hygienic lessons on the skin, use of the bones, effect of narcotics and stimulants. Lessons on eating, drinking, breathing, sleeping, healthful foods and drinks. Use of the muscles. Kinds and time for exercise. Value of sleep.

IV. Continuation and completing reading of stories and fables, keeping in mind the related work in Group III.

V. Continuation of free-hand drawing, with objects such as trees and animals. Study of pictures for story. Paper folding and paper cutting. Simple elements of definite drawing of lines, straight and curved.

THIRD GRADE.

I. (*a*) Different portions of several second readers. Supplementary reader. Introduction of third reader.

(*b*) Copying and writing from dictation with ink.

(*c*) Frequent composition exercises, with increased attention to form and correctness. Attention to choice of words, forms of words, also to clearness and originality. Discussion of right form of sentence for the expression of thought.

(*d*) Memory work continued. Entire selections memorized.

II. Addition and subtraction with and without objects. Multiplication and division clearly developed. Application of familiar weights and measures. Fractional parts especially emphasized. Original problems submitted and worked. Comparison of objects with respect to mathematical proportions. Measurement of familiar distances and surfaces. Proper application of the same.

III. Discussion of the qualities of objects. Adaptation of animals and plants to their environment. Discussion of changing length of day and night and varying temperature. Life history of familiar plants. Detailed study of some drainage system, developing concepts of valley, hill, slope, watershed, plain, etc. Discussion of erosive action of water, soil formation, water, record map of town, study of neighborhood, fixing points on the compass. Flesh-making and heat-giving foods. Wholesome and unwholesome drink and foods. Simple lessons on digestion and circulation of blood. Care of parts of the body, developing especially the moral value of cleanliness, neatness, etc. Introduce elementary notions of geography of Porto Rico without use of text-book.

IV. Classical myths and stories, Bible stories, building in the mind, steadily, ideals of what life ought to be. Simple elements of civic life. Reason for law, for legal restraints. Duties to one's country, significance of the flag.

V. Rote songs continued, and, if possible, simple musical elements. Illustrative drawing. Harmonious arrangement of colors in paper folding and paper cutting. Beginnings of simple design.

FOURTH GRADE.

I. (*a*) Complete third reader. Extend reading of supplementary matter. Reading of entire books assigned by the teacher.

(*b*) Specific instructions to pupils who have not learned to form letters well.

(*c*) Abundant composition and dictation exercises, noting now especially the development of a style which shall be simple, clear, and in harmony with the character of the thought of the child. Reporting in writing the substance of the books read. Engaging in conversation for the purpose of developing a fluent oral style.

(*d*) Memory work continued.

II. Knowledge of larger quantities, say, to 1,000, or perhaps more. Thorough mastery of the fundamental processes. Drill on fractions to twelfths. Teach elements of decimal system, especially as illustrated in the use of United States money. Simple business transactions. Common weights and measures. Areas of simple geometric magnitudes.

III. Study of the development of animal life and of typical plants. Develop the significance of pebbles, sand, and rocks. Effect of heat on water and air. Effect of heat, water, and air on rocks, animals, and plants. Movements of the sun and moon. Some attention to star groups and their recognition. Lessons on natural divisions of land and water. Map interpretation—use globe. *Analyses of Porto Rico*, then of North America. Special lessons on climate.

Point out salient geographical features of the United States. The anatomy of the human body, dwelling especially on the bones and muscles, joints, ligaments, and cartilage. Effects of narcotics and stimulants.

IV. Stories from pioneer life, especially in Porto Rico and the United States. Stories of famous persons, like Marco Polo, Columbus, Washington, John Smith, Raleigh, Ponce de Leon, Lincoln, Franklin, Lafayette, Fulton, Morse, Grant, etc.

V. Sketching from nature or objects. Analyses of leaves and flowers for color. Study of famous paintings for knowledge of color, outline, form, etc. Analyses of mass pictures. Study of tints and shades of one color. Development of floral and other designs. Drawing with the ruler, followed by copying if necessary to fix concept. Subdivision of designs. Rote singing continued, with some attention to the building of musical system and use of notes, rests, accents, etc., remembering always that the language work and the number work, together with the manual dexterity that grows from simple art elements, form the basis and core of any system of instruction, and that the emphasis of early work must always rest upon these fundamental elements, and that all nature study, all history and geography, and all other supplementary matter has value only as it contributes to the intensifying of these fundamental parts of the curriculum; and of these fundamentals first and most important of all is the language work.

FIFTH GRADE.

I. (*a*) Reading from the fourth reader, with special attention to the character of the literature and an interpretation of the thought, making the study both informational and cultural in its character.

(*b*) Gradually lessen the instruction in writing, but insist that composition and other work done by the pupils shall be their best efforts.

(*c*) Composition exercises covering the scope of the reading, paying attention to the figures of speech, different forms of sentences, correct punctuation and capitalization, and the right use of words.

(*d*) Memory work continued.

II. Drill in fractions, including all the fundamental processes and problems in common weights and measures, and simple business forms. Instruction on plane figures. Rules for surface of cube, prism, and square pyramid. Decimal system.

III. Plant analyses continued, emphasizing roots and stems. Study of the form, leaves, and bark of trees. Influence of the sun in producing the seasons and day and night. Relation of insects to man as useful or injurious. Countries of North America, dwelling especially on mountain ranges and watersheds. Special lessons on soil. Study of the West Indies and Central and South America. Special lessons on climate and productions. The structure, kinds, and uses of the muscles. Study of the skin, hair, and nails. Effect of bathing and clothing, stimulants and narcotics. Supplementary reading bearing on natural history, geography, and physiology.

IV. Reading relating to explorations and discoveries in North America and South America. Study of American colonial life and Porto Rican life, touching upon the Indians and the white man's struggle for occupation.

V. Free-hand drawing, simple plant, fruit, and geometric objects. Study of color. Study of famous paintings.

SIXTH GRADE.

I. Continuation of the work in language of the year before, following substantially the same general plan and finishing the reading of the fourth reader.

II. Metric system, percentage in its simplest applications. Simple problems in denominate numbers, computations of solid contents of simple magnitudes. Measurements of surface, business problems.

III. Study of vegetation in Porto Rico, dispersion of seeds. Effect of heat and gravity on water and air. Study of bird life and its dispersion. Simple laws of heat. Review the United States and Porto Rico geographically. Study the British Isles, Germany, France, and Spain. Lessons on Cuba, the Philippine Islands, on winds, and ocean currents. The structure of the muscles and skin. The growth, waste, and renewal of the body. Simple laws of digestion, circulation of the blood, and the relation of the blood to health. Effect of alcohol *on the digestion and the circulation.* Suitable supplementary reading in harmony *with the work of the year.*

IV. In United States history, the period of colonization and of the Revolutionary war. Stories in connection with the history of Great Britain, Germany, France, Spain, Cuba, the Philippines, and other countries important to the pupils.

V. Drawing of plants and common objects. Analyses of leaves and flowers for color scheme. Study of famous paintings, using the results as language and history material. Accurate drawings of simple rectangular objects and the applications in appropriate material.

SEVENTH GRADE.

I. The formal study of the sentence, parts of speech, phrases, clauses, analyses of sentences, and special attention to English conversation.

II. Application of percentage to insurance, interest, commission, taxes, etc. Business. Business transactions and accounts. Thorough study of inclosed and solid contents of cylinder, pyramid, and cone.

III. Study of grasses and grains. Typical marine animals. Some plant family, as the rose. General review of North America. Study of Asia and Africa, noting especially colonies and dependencies, with special lessons upon productions and government. Study of coal, its distribution and uses. The composition and purity of air, organs of respiration, including ventilation, disinfectants, exercise, and clothing, vocal organs and their functions, effects of stimulants and narcotics.

IV. Special attention to United States history from 1783 to the civil war, dwelling especially upon the personalities of the characters rather than the administrative problems. Reading from early history of England. Study of the local government officials, by whom chosen, duties, etc. Study of insular government and United States Government to fix civil processes clearly in the mind.

V. Drawing continued in harmony with the work of the year before. Music and calisthenics.

EIGHTH GRADE.

I. Study of literature. The reading of pedagogical selections and general survey of the field of English and Spanish literary development, dwelling especially upon the authors that have touched the life of Porto Rico. Study of the English language continued, including remaining parts of speech. Rules of syntax. Analyses of sentences. Special attention to English conversation.

II. Drill on definitions, rules, and formulas in arithmetic. Problems and theories relating to angles and lines. Simple accounts; special attention to business forms.

III. Study of poisonous plants and trees. Elementary lessons on light, sun, and electricity. Comparative study of climate, winds, and states of society. The nervous system. Organs of the special senses. Effects of narcotics and stimulants upon the nerves. Appropriate reading relating to the above topics.

IV. Study of recent United States history, beginning with the civil war and studying current events. History of Porto Rico to the present time. Reading of English history of the eighteenth and nineteenth centuries. Principles of State government; special attention to the Constitution of the United States. Object of laws, and duties of citizens and of officials. Rights and duties of nations, war, and arbitration.

V. Drawing in any medium of common objects. Analyses of beautifully colored nature objects for color scheme. Study of buildings and their influence. Simple perspective. Study of historic ornament and complementary groups of colors. Continuation of industrial drawing and processes. Drill in music and calisthenics.

It is understood that this is a mere outline to be followed in the main. That in the primary school the first year at least 40 per cent of the entire time should be devoted to Group V, 12 per cent to Group II and Group III, and the remainder of the time to Group IV. Continuing in this way until the third year, gradually lessen the time to Group I and to Group V, increasing the time in Groups II, III, and IV, in the order named, and in the fifth year giving 35 per cent of the time to Group I, 20 per cent to Group V, 15 per cent to Group II, 20 per cent to Group III, and the remainder of the time to Group IV, carrying this general relation throughout the sixth, seventh, and eighth years, never sacrificing the language work to any other feature of the course. It is understood further that in the rural schools the less essential parts of the course *may be omitted, but* in the graded schools, so far as possible, the entire course

of study should be undertaken with such modifications and omissions as may be made absolutely necessary by local conditions, and which shall be made only by the advice and consent of the supervisor of the district and the principal of the school. Do not allow pupils to enter a higher grade than the one in which they can do the work satisfactorily. It is always easy to promote a child, but always difficult to reduce his grade. It is better to put him in the next lower grade than in the one next higher. It is not so much a question of what grade a pupil is in as it is a question as to what kind of work the pupil does in the grade. The teacher should under all circumstances equip herself in all the different groups of studies here provided for. It is further recommended, and even urged, that in each school there shall be collected appropriate objects for the proper presentation of these lessons. These objects may be gathered by the children and teacher in the neighborhood or purchased by the board of education or made by the children themselves under the direction of the teacher. It is a poor school that does not, through its own resources, provide at least some equipment to do objective teaching. The real test of good teaching is to be found in the power of the child to think clearly and to express his thoughts in language, both oral and written, and no lesson should be considered well taught until the child has acquired the ability to give an intelligent report of that lesson. Remember that it takes time to develop mental power, and that very moderate progress with work well done is better than haste attended by superficial knowledge.

Beyond all courses of study, and more important than any part or parts of the same, is the power and life of a noble teacher, impressing upon the children from day to day the simple lessons of Christian manliness or womanliness, earnest devotion to country and home, and that series of civic, social, and moral virtues which in the aggregate make up a noble character. The end of all true teaching is right living.

The foregoing is intended merely as an outline course and to furnish the basis of detailed instruction by the various superintendents, uniformity in which is in a measure secured by almost daily correspondence with the central office and by the exchange of circular letters. The emphasis in the course is laid entirely upon the fundamental processes of arithmetic and the learning to read and write correctly both the English and Spanish languages. No great difficulty has been experienced with the language problem in Porto Rico. There was no confusion of tongues there to embarrass the school authorities as in the Philippines, where they were compelled to adopt English as the one language of the public school, because it was in reality the language that would go furthest, considering the multiplicity of dialects in the entire region under the jurisdiction of the educational authorities of the Philippine Islands. In Porto Rico there is but one language generally and universally spoken, and that is Spanish, but in their new relations the people are eager to acquire English. The schools have to be conducted in the Spanish language, and were in full operation in that tongue when the American military control became effective. They have been conducted in that language ever since. The military law required that at least one English teacher should be assigned to each municipality. This was for the purpose of not only providing teachers of English, but for distributing throughout the island a corps of American trained teachers whose pedagogical training would make itself felt in their contact with the native Porto Rican teachers. From this beginning gradually the number of American teachers was increased until it is at the present time, and has been during the larger part of the period of civil government, approximately one to eight. In every graded school the English language is taught by a teacher for whom it is the native tongue. This is accomplished by making the American teacher a visiting teacher of the language, giving lessons in three or four schools in the same town each day. All of the large towns have petitioned to have the school authorities provide at least one school, and in some cases more, where all of the subjects are taught in English, either by American teachers or by Porto Rican *teachers qualified to teach* in the English language. Over fifty such schools

exist to-day, and they have been introduced gradually only in response to an urgent demand, and always in numbers less than such demand called for on the part of the Spanish-speaking population. This is an evidence of the desire of the people to learn English. Another such evidence is the fact that the American teachers are called upon to give private lessons outside of school hours to persons of all ages. They are required, as a part of their public duties, to hold public classes at least three times a week, which are open free of charge to any Porto Rican teacher or member of a school board who cares to attend. These classes are well attended, and usually meet more frequently by special arrangement with the teacher who is required to hold them. The work in English in the graded schools is further advanced by certain requirements like the following: Every Porto Rican teacher is required as a condition for the annual renewal of his teacher's license to pass a creditable examination in the English language, and these examinations have become more difficult from year to year. A Porto Rican teacher who acquires English sufficiently well to be able, in the judgment of the district superintendent of schools and the local board, to give instruction in the English language covering the entire course of study prepared for his grade is entitled to an increase of $10 per month in his salary.

The children are quick and bright in language work, as they are in anything where the memory plays a larger part than the reasoning faculty. They are taking up English with remarkable facility, and now at the end of five years one rarely finds a small child who has been at school who can not carry on some conversation in English, and it is well within the range of possibility to expect that within ten years a practical knowledge of English will be well spread throughout the island.

In the rural schools the problem of teaching English is more difficult, and in some cases superintendents have advised dropping English rather than have it poorly taught by Porto Rican teachers who have little knowledge of the language themselves. In most cases, however, perseverance in the original plan to have English taught in every school in the island has met with public approval and with encouraging results, even where they were not entirely satisfactory.

Other special subjects in the course of study present some difficulty; nature work, hygiene, music, and drawing are not always carried out as well as they should be. In the larger towns special teachers are usually employed to give the work in music and drawing, as visiting teachers. The work in all these subjects in the smaller towns, where the special teacher does not go, lacks uniformity and in many cases the requisite excellence. Both teachers and pupils are peculiarly apt at drawing, and the possibilities of developing a latent talent or directing it into channels of usefulness in some form of industrial art are worthy of greater consideration than it has been possible as yet to give them.

The statistics of the graded schools are included in the summary given in the previous section under the head of "Primary schools;" the possibility of industrial training introduced into the graded schools is referred to in the next section.

VI. SPECIAL SCHOOLS: NORMAL SCHOOL—HIGH SCHOOLS—INDUSTRIAL SCHOOLS—RURAL AGRICULTURAL SCHOOLS—NIGHT SCHOOLS.

Apparently no serious or successful attempt to organize secondary or higher instruction was ever made under the Spanish régime in Porto Rico. The children who received anything more than the training of the elementary grades of the primary school were prepared by private teachers and sent abroad to schools in Spain, Cuba, or the United States. The teachers in the public schools either came from Spain or went there for their diplomas. The professional men, few

in number, received their training for the most part in the medical, law, or theological schools of the Spanish universities, and a few through a sort of apprentice system in the offices of the professional men in the island. The Instituto in San Juan, as has been already seen, had an ambitious programme, but largely on paper, there being little or no effective teaching. During the decade immediately preceding American occupation there was an arrangement with the University of Habana by which some young men received lectures from physicians and lawyers in San Juan, and in alternate years were examined by a visiting delegation of professors from Habana, who also gave brief courses of lectures on the occasion of their visits to Porto Rico. These young men could also go to Habana for their examinations, and upon passing the same (either in Porto Rico or Habana) receive their diplomas from the Cuban university. Many persons, as a result of such inadequate provision for higher training, practiced the learned professions, especially medicine, with little real preparation, while the few who could afford to spend years abroad came back with the technical training of the best European and American universities. The door of opportunity had not yet opened to the poor boy.

THE NORMAL SCHOOL.

The military authorities of the United States were too busy in the short period of their occupation, on account of the magnitude of their task, to do more than attend to the more pressing needs of the primary schools. The model school, for which the first building specially constructed for school purposes was erected just outside the old wall of the city of San Juan, was in reality a practice school of primary grade, intended to have a part in a plan for training primary teachers, which was to have its culmination in a normal school, for which the military government purchased a site at Fajardo, on the east coast of the island, about 20 miles from San Juan. Here a normal school was opened in a rented building in the academic year of 1899–1900, but the location proved unsuitable and there were few students. The land purchased was later abandoned for school purposes, and another site at Rio Piedras was purchased by the civil government, situated within 7 miles of San Juan, and accessible to the capital city by rail and trolley. On this ground there was constructed a large and commodious building, the most expensive school building as yet erected in the island. More land was acquired later, making 150 acres in all, and the property is now a part of the University of Porto Rico.

The new course of study and revised school laws at the beginning of the period of civil government made provision for one normal school, four high schools connected with graded schools in San Juan, Ponce, Mayaguez, and Fajardo, and known as high and graded schools, and a little industrial training (sloyd) in the lower grades of one of these schools. Vigorous efforts were made to enlist young, ambitious persons to train themselves for teaching, and before the new building for the normal school was begun at Rio Piedras Governor Allen placed the summer palace and botanical garden at Rio Piedras at the disposal of the commissioner of education for the use of the normal school, which was moved from Fajardo and occupied this building from September, 1900, until May, 1902, when the new building was ready for occupancy. The building which had been for years the summer residence of the Spanish governors was in rather bad repair, and really no longer suitable for residence purposes; but nevertheless the fine democratic spirit of the first American civil governor, who decided that one official residence was enough, and that the cause of education was of more importance than his personal comfort or pomp, was not without its effect. The young people of the island soon began to realize that the new

Americanism meant to take education seriously, and they responded to the sentiment by what was veritably an educational awakening, which did away not only with all open hostility to the public schools, but also with indifference as well. No single event did more to bring about this change than the direct allotment of $250,000 from the Porto Rican customs duties paid in the United States, which President McKinley directed should be devoted to the construction of schoolhouses. As the Porto Ricans saw brick and mortar going into new and practical school buildings, their faith in the new régime increased. An old coachman driving past a newly constructed schoolhouse said to his passengers: "I am an old man, and I have seen nothing but money going out of the island in the pockets of Spaniards during my lifetime, and I have been strung up by my thumbs to the rafters of my own house by a marauding band of Spanish soldiers, who outraged my family; but now, when I see the Americans collecting taxes and spending money on schoolhouses, I know that they are not working for themselves."

To the Insular Normal School, in its new building, was added a practice school conducted in another new building of six rooms, constructed on the model already used in several of the town graded schools, but manned at the outset by expert American practice teachers. This school opened its doors on February 25, 1903, and the first four grades were filled with children selected from the schools or town of Rio Piedras who gave promise of being able to carry on the studies of the regular public school course given in the English language. A double experiment was about to be tried, namely, that of giving the normal school pupils the opportunity of watching an expert American teacher at work with a class and of giving those same pupils some work as pupil teachers in the last year of the normal school course, and also that of testing the practicability of school work done in the English language for the pupils of both the practice and the normal schools. Both experiments have worked better than we at first expected.

The normal school during the first year of its existence at Rio Piedras had about 100 pupils, including a few special students and a preparatory class. During the year 1902–3, when the practice school was opened, the normal had an average of 150 pupils, including the preparatory class, which was discontinued the next year, the preparatory pupils being put in the upper grades of the practice school. The standard of admission to the normal at the outset had to be very low, but the effort was systematically made to raise it, until in September, 1903, we had for the first time a normal school proper, to which no one was admitted except on examination based on the completion of the course of study laid down for the eight years' course in the public schools. The worthlessness of most of the old Spanish licenses and diplomas had been proven by the lack of such preparation on the part of many of the former pupils in the normal who had been admitted on such diplomas.

The faculty of the normal was made up mostly of Porto Rican and American male teachers in about equal numbers, but with an American principal. This faculty petitioned in 1902 to have all the work of the school conducted in the English language, and Spanish taught merely as a language subject. This petition was signed by at least one professor who felt that he was too old to acquire sufficient English himself to qualify him to hold his position if the school were on an English basis, but as he honestly and patriotically put it "The welfare of this school and of the educational system of Porto Rico demand that the teachers of the future shall be qualified to do all their work in English, and my personal interests must not be considered." In September, 1903, we began to go over to an English basis with

the upper classes, and the work of the normal school is now done without difficulty in either English or Spanish.

Of the transfer of the normal school to the control of the board of trustees of the university on March 12, 1903, and of its subsequent record as the normal department of the university, we shall speak again later. Suffice it to say here that no change was made in its normal development and course of study as already in execution. A principal's house had been constructed on the grounds, giving the principal a residence that enabled him to give the school closer personal supervision, and a small frame rural schoolhouse with an agricultural garden, both of which were used for laboratory work in teaching the elements of agriculture, botany, etc., in the normal school course. One hundred and seven-three students (76 men and 97 women) received instruction in the normal department in the academic year 1903–4, and all eight grades of the practice school, with an enrollment of 192 more pupils were in operation. A principal and ten instructors were employed in the normal, and a principal and five instructors in the practice school. The course of study in the normal was based on the principle that concentration of effort and attention on a few subjects for a limited time, with daily recitations, produced the best results.

The academic year is divided into three terms. In the first year the work is as follows:

First term: English (reading and conversation); Spanish (reading); physiology; American history; drawing.

Second term: English (reading and conversation); Spanish (grammar); arithmetic; pedagogy; American history; geography.

Third term: English (grammar); arithmetic; pedagogy (observation in practice school); music; geography.

After the first year the course is bifurcated into a scientific and a literary course, as follows:

Second year.—First term: Scientific course (algebra, pedagogy, English grammar, physiology). Literary course (algebra, pedagogy, English grammar, Spanish composition and music). Second term: Scientific course (algebra, physical geography, pedagogy, English composition, drawing). Literary course (algebra, physical geography, pedagogy, English composition, drawing). Third term: Scientific course (civil government, botany, algebra, English composition, drawing). Literary course (civil government, botany, Spanish rhetoric, English composition, drawing).

Third year.—First term: Scientific course (geometry, botany, physics, American literature). Literary course (geometry, general history, physics, American literature). Second term: Scientific course (geometry, physics, psychology, Spanish composition and rhetoric). Literary course (geometry, general history, psychology, American literature, Spanish literature). Third term: Scientific course (geometry, physics, pedagogy, political economy). Literary course (Spanish literature, general history, pedagogy, political economy).

I still believe, as I have stated in all three of my annual reports, that the normal school is the key to the educational situation in Porto Rico. As it improves and prospers, so will the school system of the island give good results. No money and pains spent on the normal could be better spent elsewhere. I also base my faith in the possibilities of steady progress for the Porto Rican people upon what I saw of the young men and the young women in the normal school. They made great sacrifices to come to the school. They worked harder and better to improve their opportunities than any similar number of students *in any school* I have known in the United States.

HIGH SCHOOLS.

The second class of special schools is the group of high schools, which have not yet filled any large demand, and consequently have not attained so high a degree of development as the normal school. The first one to receive pupils was that of San Juan, in which two four-year courses, in one of which all the work was done in Spanish and in the other all the work was done in English, were begun in September, 1900, and the first graduating class finished in June, 1904, ready for college. This is the aim of the course, to fit boys and girls for admission to an American college. The standard of graduation does not quite come up as yet to the highest standard of admission in American colleges, but we should expect our graduates to be able to take care of themselves in the average college with very slight, if any, entrance conditions. In Ponce the high school course was begun only in English, and no pupils were ready for high school work in the Ponce high and graded school until September, 1902. The same plan was followed in the Mayaguez high and graded school, where pupils were not ready for high school work until September, 1903. No pupils have been advanced to high school work in the Fajardo high and graded school. The plan which contemplated the four centers for high school work, equally distributed geographically, is a wise one and will be justified in time.

The Spanish high school course in San Juan has been abandoned because of too few pupils and the fact that all of the pupils who reach this grade of work are able to take the work in English. A commercial course has been arranged for in its place to meet the special needs of those preparing for business careers rather than for college. In the first term of the year ending June 30, 1904, there were 108 pupils enrolled in high school work, as follows: San Juan, 20 first year of course, 26 second, 8 third, and 5 fourth, total 59; Ponce, 16 first year, 12 second, total 28; Mayaguez, 21 first year.

The course of study laid down for the high schools has undergone many modifications from year to year dictated by experience and all in the line of simplification. The course at present is as follows:

Course of study for high school grades.

NINTH GRADE.

I. Literature: The reading of the Standard Fifth Reader and supplemental works on English literature. English grammar, including etymology and syntax, especially the oral analysis of sentences rather than any system of diagrams. Review of Spanish grammar and syntax. Begin Latin. (Fifteen periods a week.)

II. Mathematics: A thorough drill in arithmetic, including especially percentage and its applications, to be followed with problems growing out of all the subjects covered during the seventh and eighth grades. Algebra, beginning with the subject, and extending through the fundamental processes, factoring, and simple equations. Applications of arithmetic to business accounts. (Ten periods a week.)

III. Complete political geography, with special attention to the Far East, Russia, and South Africa, and include physical and commercial geography. (Five periods a week.)

IV. Greek and Roman history. The general study of history, special stress to be laid upon the laws and duties of citizens and officials of nations, together with the bearing of ancient history upon modern times. (Three periods a week.)

V. Drawing from object. Study of historic drawing. Simple architectural drawing. Drill in music and calisthenics. (Four periods a week.)

TENTH GRADE.

I. English classics. Latin: Cæsar. Spanish composition and rhetoric. (Fifteen periods a week.)
II. Algebra (continued). Plane geometry. (Ten periods a week.)
III. Physics, chemistry. (Ten periods a week.)
IV. Mediæval and modern European history. (Three periods a week.) Constitution of the United States and the organic act of Porto Rico. (Three periods a week.)
V. Drawing, music, and calisthenics. (Four periods a week.)

ELEVENTH GRADE.

I. English classics. Latin: Virgil. Spanish literature or begin French. (Fifteen periods a week.)
II. Geometry: Review plane and begin solid. (Five periods a week.)
III. Physics, chemistry. (Ten periods a week.)
IV. Mediæval and modern European history. (Three periods a week.)
V. Mechanical drawing, music, calisthenics. (Four periods a week.)

TWELFTH GRADE.

I. (*a*) English literature and composition. (*b*) Latin: Cicero. (*c*) Spanish, French, German, or Greek. (Fifteen periods a week.)
II. Solid geometry. Review arithmetic and algebra. (Ten periods a week.)
III. Chemistry, biology. (Five periods a week.)
VI. United States and English constitutional history. (Five periods a week.)

INDUSTRIAL SCHOOLS.

The third class of special schools covers the industrial schools, of which there were four in operation at the close of the academic year 1903–4, with a total enrollment of 486 pupils distributed as follows: San Juan, 115; Ponce, 112; Mayaguez, 143, and Arecibo, 116.

Under the Spanish régime considerable money was spent in extensive equipment purchased in Europe for a school of arts and trades, which was established in San Juan in a government building, part of which was used for a poorhouse, insane asylum, and general eleemosynary institution. The school had some connection with these institutions but was short lived, the apparatus for the most part being destroyed in a destructive fire during the summer preceding American occupation.

In the second session of the first legislative assembly I presented a bill giving the commissioner of education the custody of all the machinery, apparatus, etc., saved from the fire in the former school of arts and trades, the use of any unoccupied government building in San Juan which the commissioner of the interior could provide, the unused balances from all unexpended appropriations for various educational appropriations during that fiscal year (1901–2), and the authority to establish, equip, and maintain industrial schools wherever the funds at his command would allow. That bill became a law, and I am prouder of it than of any other act in my legislative record, because I believe it struck at the roots of the educational problem in Porto Rico. Under it we began in the academic year 1902–3 with a few students in a rented building situated on the celebrated military road less than one-half a mile from the city proper of San Juan. No public building was then available. Now that same school is housed in the city itself in a fine old Spanish building which was formerly used as a military barracks. The old machinery and apparatus proved for the most part worthless. We got some printers' supplies from the ruins, and with presses that we purchased a printing office that does the government work is operated as a *part of the San Juan Industrial* School. The unused appropriations gave us

about $40,000 as a nest egg to start operations, and the legislature was reasonably liberal with these schools in subsequent years, at least, until the present year. The pupils in the San Juan school were recruited from the fifth grade of the public schools, and that standard of admission was demanded. My plan was to make an industrial school in every town an integral part of the public school system by taking pupils from the public schools who were prepared to enter the sixth grade, give them one year of manual training corresponding to the sixth year of the public school course and as preparatory to a two-year course in one of the several trade shops to be established for instruction in practical trades under the direction of experienced master workmen—such as carpentry, blacksmithing, tailoring, printing, plumbing, and harness making for boys, and cooking and laundry work, dressmaking, art needlework, and professional nursing, for the girls. Beginning with the seventh grade the pupils in the industrial schools were to drop their book studies for the most part and spend most of their time in the trade shops of the school, and it was expected that with two years of this work they could graduate with their fellow students in the eighth grade of the public schools, prepared either to earn their own living at house trades or to enter active business on much better terms than the regular apprentice. We had also in mind a graduate course of two years more, which should be established in the industrial schools in time, and give those who could take it the necessary equipment for a master workman in one of the few simple trades which were most needed in the island.

The following course of study, as laid down for these schools, will probably show more clearly what has been attempted in carrying out this plan. It has necessarily been modified somewhat in its application to the local conditions in the five towns of San Juan, Ponce, Mayaguez, Arecibo, and Guayama, where these schools have been organized, but a reasonably uniform adherence to its essential features has been secured. An essential feature of the plan was the uniform supervision secured through the appointment of a supervising principal of industrial schools; and we were fortunate in having in Mr. Frank D. Ball, of the Worcester Polytechnic, a man for this work who had had large experience with the varied conditions of industrial school work in the United States at Tougaloo, Miss.; Throop Institute, California; Chicago, and in the New England States.

Outline for course of study in industrial schools.

FIRST YEAR.

I. Language. (Ten periods per week.) Reading and writing Spanish and English; dictation and composition of business forms and letters in both languages; exercises in English, with special practice in conversation; elementary Spanish and English grammar.

II. Mathematics. (Five periods per week.) Arithmetic: Review as rapidly as possible the fundamental operations and processes; teach thoroughly common and decimal fractions, giving ample opportunity for practical exercises on the fundamental processes; thorough drill with practical problems in English and metric systems of weights and measures; elementary business accounts, methods of rendering bills, keeping records, and making payments. Mensuration: Plane figures and surface measurement of cube, prism, and square pyramid.

III. Science. (Five periods per week.) Geography: (*a*) Physical and political geography of North America, West Indies, and Central and South America; (*b*) elementary commercial and industrial geography of the United States and West Indies, paying special attention to crops, products, manufactures, sources of raw material, and routes of trade and travel.

IV. History. (Three periods per week.) (*a*) Reading: Stories of exploration and discovery in North and South America and the West Indies; (*b*)

study early colonial life in the United States and Porto Rico, touching on the relations of the Indians with the Europeans and the struggle for occupation.

V. Drawing. (Ten periods per week.) (*a*) Freehand drawing from geometric objects, simple plants and fruits. (*b*) Mechanical drawing, with attention to scale, accuracy, and neatness of execution. Floor plans; models for tools and machinery.

VI. Hand work. (*a*) Sloyd, for boys. (Five periods per week.) Use of tools in woodworking. Construction of simple models, teaching and requiring accuracy of hand and eye. Construction of articles for household use—brackets, frames, and light furniture. (*b*) Cooking, for girls. (Three periods per week.) Preparation of common articles of food, with special attention to dietetic and hygienic principles. Methods of cooking meats, vegetables, etc., and dishes usually eaten in Porto Rican homes. (*c*) Sewing, for girls. (Three periods per week.) Work in cutting from patterns, fitting, basting, and sewing, buttonhole making, etc. (*d*) Needlework, for girls. (Two periods per week.) Drawn work and lace making, knitting, darning, embroidery, etc.

The Mayagnez school was the second one started (September, 1903), and it is still located in the rented building which was remodeled for the purpose. For the Ponce school, with the aid of the municipality, which paid half the cost, a fine building, costing, with the preliminary equipment, about $25,000, was constructed, and dedicated on February 22, 1904, as the Roosevelt Industrial School. Miss Alice Roosevelt, on the occasion of her visit to Porto Rico in 1903, laid the corner stone of this building. It is a one-story building in the Spanish renaissance style of architecture, built on three sides of a patio, or what will be an interior court, or square, some day when the building is enlarged, and it is so constructed that a second story can be added when the needs of the school require it. It contains an assembly hall, class rooms, bathrooms, shops, and teachers' rooms, and is beautifully situated among the tropical trees of a large tract of land, on another portion of which a high school building is now in process of construction. Next to the normal school building at Rio Piedras, it represents the largest expenditure ever made for a school building in Porto Rico. The Arecibo School was opened in the same academic year in a remodeled government building in that town, and is well equipped for effective work. The Guayama School was opened in a rented building at the beginning of the academic year 1904–5. Plans are being discussed by the department of education and the municipal authorities for the construction of a new building in Guayama.

The pupils in all these schools have shown unusual artistic qualifications for craftsmanship, and have been, with few exceptions, industrious. It is too soon to pass final judgment upon this work or to estimate precisely its place in Porto Rican education. The results already attained have made themselves felt in many homes and are full of promise.

RURAL AGRICULTURAL SCHOOLS.

A fourth class of special schools needs but brief mention, because reference has already been made to them in speaking of rural schools, and the problem they present will be discussed briefly when we refer to the agricultural department of the university. I refer to the agricultural rural schools, of which there were 13 in operation in 1903–4, with a total enrollment of nearly 700 pupils. These are regular schools, housed in new, modern, frame buildings, with at least an acre of land to each school, and a tool closet or shed containing equipment for agricultural work. In some cases the class-room work and the garden work are both in charge of the same teacher, but in most cases a regularly qualified rural teacher is employed to do the class-room work, and a visiting teacher of agriculture gives from one-third to one-half his time to one school for the outdoor work. Both boys and girls are required to spend from

one to three hours each day at work with hoe or spade or in study or observation of nature work as illustrated in the garden, and under the direction of a specially trained teacher. Very young pupils are taken along with older ones in these agricultral rural schools, but their tasks are proportioned to their years. Each school may matriculate 50 pupils. The object is to instill and cultivate a healthy, intelligent interest in the soil, and to arouse a curiosity in the mind of the child to know more of the mysteries of nature with which he is in so direct association in his home by reason of the agricultural pursuits of his parents. The attempt is also made to introduce slowly the use of improved tools and machinery and methods of cultivation, which often have an even greater interest for the parents in the neighborhood than for the children. In time these buildings should be made neighborhood centers, with Sunday and evening lectures and illustrated talks for adults.

NIGHT SCHOOLS.

The fifth and last class of special schools which will be discussed here, like the fourth class and also the third up to the present, has to do with primary rather than secondary education. I refer to the night schools. In nearly every town there is at least one night school, and sometimes more. They are usually taught by the day school-teacher, making use of the same schoolroom and equipment, but registering perhaps double the number of pupils, mostly adults or pupils older than the day scholars, and teaching them in groups, according to their attainments, the elements of reading (English and Spanish), writing, and arithmetic. Nothing but the most elementary instruction, restricted to these subjects, is attempted, and when the pupils get beyond this they are requested to give place to others and either attend the day school or go elsewhere for further instruction. There were 18 night schools open during the academic year 1903–4, with an average enrollment of 1,200 pupils. The eagerness with which such opportunities are grasped by people long deprived of educational advantages is pathetic. An incident, only one of many, quoted in one of my annual reports illustrates this and speaks for itself: "We opened one night school recently in Ponce, notice being given at 2 p. m. that pupils would be matriculated at 8 p. m. the same day. At that hour, on only six hours' notice, 172 pupils presented themselves. The building would hold no more, and as many more persons were left standing in the street unable to gain admission to the building. We could take only 108 of the 172 who managed to enter the rooms where pupils were examined."

VII. THE UNIVERSITY OF PORTO RICO.

It will be readily understood from what has already been said of the limited scope of secondary education in Porto Rico and the peculiar conditions under which the professional classes for a population of 1,000,000 people have been trained that there is an urgent need for professional schools in medicine, including pharmacy, engineering, and law at least, in addition to professional training for teaching. Probably not one in ten of the physicians now practicing in the island have ever seen a well-equipped, modern hospital, not to speak of having served an apprenticeship in one. Yet there are a few who have enjoyed the very best opportunities afforded in Paris, Madrid, or New York in all the professions enumerated.

The limited financial resources, so inadequate for the needs of primary education, could not be used for these schools. Private wealth was neither sufficient nor to be found in the hands of those educated to giving by the social standards of a Spanish-American country to endow private colleges or technical

schools. The church was in no position to establish church schools for higher education. As far back as the time of the military government the suggestion was made in official reports that aid might properly come from the Federal Government, but Congress did not respond even to the extent of extending the provisions of the Hatch and Morrill acts for the endowment of colleges of agriculture and the mechanic arts to Porto Rico, as it had done for Alaska and for all the States and Territories of continental United States.

An insular legislature was in session in 1903, and was ambitious to make a record in matters pertaining to education. It had passed a codified school law, strengthening the foundations of the school system at every point, and a law that would have reflected credit on any State in the Union. A bill, or rather several bills, making appropriations of amounts varying from $10,000 to $20,000 for the starting of professional schools were presented in the lower house of the assembly and favorably considered. The amounts stated could have been spared only at great sacrifice, and they were so inadequate that it was reasonably certain they would not have accomplished the purpose contemplated. The situation was both pathetic and unavoidable. The department of education decided that the only way to meet it was to put on the statute books a comprehensive university law, following the general plan of organization of our most progressive State universities, as an expression of the needs and the earnest hopes of Porto Rico, hoping that it might appeal to the generosity of Congress and of the American people, from whom both public and private benefactions might be reasonably expected. The insular normal school, already in successful operation, was taken as the nucleus for the new university. The university law of March 12, 1903, may well be allowed to speak for itself. It is as follows:

AN ACT To establish the University of Porto Rico, to amend section 973 [923] of the civil code of Porto Rico, and for other purposes.

Be it enacted by the legislative assembly of Porto Rico:

SECTION 1. That an institution of higher learning is hereby established, to be known as the University of Porto Rico.

SEC. 2. That the university thus established shall provide the inhabitants of Porto Rico as soon as possible with the means of acquiring a thorough knowledge of the various branches of literature, science, and useful arts, including agriculture and mechanical trades, and with professional and technical courses in medicine, law, engineering, pharmacy, and in the science and art of teaching.

SEC. 3. The government of the university shall be vested in a board of trustees composed of the governor of Porto Rico as a member and its honorary president, the commissioner of education, as a member and its president; the attorney-general, the secretary, and the treasurer of Porto Rico, as ex-officiis members, and six other members, one of whom shall be the speaker of the house of delegates, to be appointed by the governor of Porto Rico, for a term of three years: *Provided,* That the first six trustees thus appointed by the governor of Porto Rico shall be for terms of one year, two years, and three years, respectively, and that after the first year two trustees shall be appointed in each and every year by the governor of Porto Rico for a term of three years. The governor of Porto Rico shall have power to fill all vacancies in the board of trustees for the unexpired term.

SEC. 4. The board of trustees shall constitute a body corporate under the name of "the trustees of the University of Porto Rico," with the right as such of suing and being sued, of making contracts, of making and using a common seal, and altering the same, of holding and transferring property, both real and personal, for the university. Six members present in person shall constitute a quorum for the transaction of any business, but a less number may adjourn from time to time and fix the time for meeting after such adjournment. The meetings of the board may be called at such times as it shall prescribe, but all meetings shall be at the university. No person connected with the university as professor, tutor, teacher, or other employee receiving a salary in said university may at the same time be a trustee of the university, and no trustee shall be entitled to or paid any compensation for his services as trustee, provided that trustees *may be allowed by* special action of the board, in each and every case voted upon separately, *necessary travelling* expenses while engaged upon university business.

SEC. 5. The board of trustees shall elect from their own number a vice-president, who shall perform all the duties of the president of the board in his absence, and when both are absent the board may elect from their own number a president pro tem., who for the time being may act as president and do and perform all acts required of the president. It shall be the duty of the president to sign all contracts, orders, and every paper obligating the university for a valuable consideration, and such contract, order, or paper shall be attested by the secretary with the seal of the trustees thereto attached.

SEC. 6. The trustees shall elect a secretary and treasurer, who shall be one and the same person, whose duty it shall be to receive and receipt for all moneys of the university, keep all accounts which may be directed to be kept by the board, keep inventories of all property of the university as minutely as may be directed by the board, keep all records of their transactions as they may require, and otherwise do such clerical and executive work as may from time to time be directed by the board, and who shall at all times be under the immediate direction and authority of the president of the board except as otherwise explicitly directed by the laws of Porto Rico or the requirements of the board.

SEC. 7. The president of the board of trustees shall be the chancellor of the university, and as such shall perform the duties usually appertaining to such office. The board shall have power to enact ordinances, by-laws, and regulations for the government of the university; to fix, increase, and reduce the number of professors, teachers, and other employees of the university, appoint or remove the same, determine the amount of their salaries and to prescribe their duties: *Provided*, That no course of study, no subject of instruction, and no course of lectures or recitations may be inaugurated or put in force without the written approval of the commissioner of education for Porto Rico having been first obtained by the board.

SEC. 8. The university shall consist of the following departments to be organized in the order of their importance as soon as the necessary funds may be available, and it shall be the duty of the board of trustees to appeal to the philanthropy of public-spirited citizens of Porto Rico and of the several States of the United States for gifts and bequests of money, books, buildings, and equipment for this purpose in addition to such financial assistance as the government of Porto Rico may have given or may give the university for its endowment:

1. A normal department, to be known as the "insular normal school," for the training of teachers in the subjects taught in the public schools of Porto Rico, and to be supported by annual appropriations by the legislative assembly.

2. An agricultural and mechanical department for the training of teachers and for the promotion of agriculture and the mechanic arts, to be maintained in conformity with the requirements of an act of Congress approved August 30, 1890, being an act entitled "An act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts, established under the provisions of an act of Congress approved July 2, 1862," and the legislative assent required by section two of the act of Congress approved August 30, 1890, is hereby given and the conditions imposed by that act as well as those imposed by the act of Congress approved July 2, 1862, are hereby accepted and imposed by this act upon the university of Porto Rico, and all moneys accruing thereunder are accepted under the conditions and terms in said acts named.

3. A department of the natural sciences and engineering.
4. A department of liberal arts.
5. A department of medicine.
6. A department of law.
7. A department of pharmacy.
8. A department of architecture.
9. A university hospital.
10. And such other departments germane to a well-equipped university as the board of trustees may from time to time be able to establish.

The treasurer of Porto Rico is hereby designated as the officer to receive the grants of moneys to be paid to the State or Territorial treasurer or to such official as shall be designated by law of such State or Territory to receive same, as provided in an act of Congress of the United States, approved August 30, 1890, and entitled "An act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agricultural and mechanical arts established under provision of an act of Congress approved July 2, 1862," and the assent of the legislative assembly of Porto Rico is hereby given to the purpose of said grants and to all the terms and conditions thereof as specified in said act of Congress. The treasurer of Porto Rico shall keep an account of the moneys hereafter received by him in pursuance of such act of Congress in a separate fund to be known as the university agricultural fund, to the credit of the University of Porto Rico, and shall pay such moneys immediately upon

receipt thereof by him to the treasurer of the University of Porto Rico upon the warrant of the auditor of Porto Rico countersigned by the governor of Porto Rico and issued upon the order of the trustees of the University of Porto Rico in pursuance of said act of Congress.

SEC. 9. The immediate government of the several departments shall be intrusted to the chancellor and the respective faculties. The chancellor shall be the presiding officer of the various faculties and the executive head of the university in all its departments, and as such shall have authority—subject to the power of the board of trustees—to give general directions respecting the instruction and scientific investigations of the several departments. The board of trustees shall, with the chancellor and with the recommendation of the several faculties, confer such degrees as in their judgment they shall deem best, and issue certificates or diplomas of proficiency in special subjects or courses of study, but no strictly honorary degree without corresponding literary or scientific attainments shall be granted by the university.

SEC. 10. The university shall be open to students of both sexes under such restrictions and regulations as the board of trustees may deem proper, and all able-bodied male students of the university may receive instruction and discipline in military tactics. Provided, that instruction in the normal department for the training of teachers for public schools shall at all times be free to the citizens and residents of Porto Rico of both sexes within the age limits and subject to the conditions of admission which the board of trustees may impose.

SEC. 11. The board of trustees shall make an exhibit of the affairs of the university in each year to the commissioner of education, setting forth the condition of the university in all its departments, the amount of receipts and disbursements, the number of professors, teachers, and other officers, and the compensation of each, number of students in the several departments and in the different classes, the books of instruction used, and an estimate of the expenses for the ensuing year, together with such information and suggestions as they may deem important or the commissioner of education may require to embody in his report. Such report of the board of trustees shall be delivered to the commissioner of education on or before August 15 in each and every year, and shall contain statistical and other data as of the close of the fiscal and academic year ending June 30 previous. It shall be the duty of the commissioner of education to lay such report of the board of trustees of the University of Porto Rico before the legislature in each and every year.

SEC. 12. The secretary of Porto Rico shall deliver to the university 10 copies of each volume of the general and special laws of Porto Rico and of the reports of the decisions of the courts and of any other public documents distributed through his office or which may hereafter be published for use in the way of exchange or otherwise in the establishment and maintenance of the university library, and said library shall be entitled to receive copies of the official reports, when printed, of the several officials of the insular and municipal government of Porto Rico.

SEC. 13. To provide funds for the current expenses of the university and for the repairs of buildings, purchase of books, and for the purpose of any scientific work which may be conducted under the auspices of the university for the benefit of science or the State, there shall be established by the treasurer of Porto Rico a fund to be known as the university fund, into which he shall pay, pursuant to law, all the following-named receipts, which are hereby appropriated for said purpose:

1. Escheated inheritances. Section 923 of the Civil Code of Porto Rico is hereby amended to read: "In default of persons who have the right to inherit in accordance with the preceding articles the people of Porto Rico shall take the inheritance and shall devote the property to the benefit of the university fund."

2. Fifty per cent of all fines imposed by the insular courts of Porto Rico.

3. Royalties from all franchises or public rights which may be granted by the executive council and the proceeds of which the executive council may designate to be paid into the university fund.

4. The unexpended balances at the close of any fiscal year of moneys appropriated by the legislature to the department of education. The treasurer of Porto Rico shall submit to the trustees of the University of Porto Rico, semiannually or oftener if requested by said board, a statement showing the balances available to the credit of said board on account of the aforesaid university fund, and shall pay quarterly to the treasurer of the University of Porto Rico, upon the warrant of the auditor of Porto Rico countersigned by the governor of Porto Rico and issued upon the order of the trustees of the University of Porto Rico, all unexpended moneys that may accrue in said university fund.

SEC. 14. Twenty-five per cent of the proceeds from the sales of all public lands in Porto Rico are hereby appropriated and shall be set aside by the treasurer of Porto Rico to the credit of a special fund to be known as the "Permanent university fund," and so *much more than 25 per cent of* the proceeds from the sale of such public lands as the

legislative assembly may direct to be set aside for the special benefit of the University of Porto Rico. The treasurer of Porto Rico shall pay to the treasurer of the University of Porto Rico, upon the warrant of the auditor of Porto Rico, countersigned by the governor and issued upon the order of the trustees of the University of Porto Rico, annually, upon a date to be fixed [by] said treasurer of Porto Rico, all moneys accruing to the credit of said University of Porto Rico on account of the permanent university fund, and all such moneys thus paid by the treasurer of Porto Rico on account of the permanent university fund shall be invested by the trustees of the University of Porto Rico in interest-bearing securities, and only seventy-five per cent of the income from such investments may be used by said trustees in the payment of current expenses or for the construction of buildings or to purchase permanent equipment. The remaining 25 per cent of the income from such investments shall be added to the principal of the same and be reinvested in a like manner and subject to the same conditions as the original investment of all moneys received from [for] the permanent university fund. No investment of moneys received from [for] the permanent university fund shall be made by the board of trustees in securities without first obtaining the written approval of the treasurer of Porto Rico, certifying that in his judgment the securities selected for such investment are satisfactory.

SEC. 15. For the further endowment of the University of Porto Rico, the governor of Porto Rico is hereby authorized to execute a quitclaim deed to the trustees of the University of Porto Rico for the tract of land comprising about 50 acres, together with the buildings thereon erected, situate in the town of Rio Piedras, and known as the insular normal school property, upon which shall be located the normal department of such university and the agricultural and mechanical department, together with such other departments as the board of trustees may decide to locate on this land: *Provided,* That nothing in this section shall be construed to prohibit the trustees of the University of Porto Rico from establishing other departments of the university or departments supplementary to the two departments herein mentioned at other places in the island of Porto Rico: *And provided further,* That nothing in this act shall be construed to prohibit the trustees of the University of Porto Rico from disposing of any part of this land which may not be needed, for the benefit of the university.

SEC. 16. Immediately upon the transfer of said insular normal school property to the University of Porto Rico, the commissioner of education is hereby authorized to transfer to said trustees of the University of Porto Rico all the equipment, including books, desks, and apparatus, and other school materials now or then appertaining to the insular normal school and its various departments, and the treasurer of Porto Rico is hereby authorized and directed to pay to the treasurer of the University of Porto Rico, upon warrant of the auditor of Porto Rico countersigned by the governor and issued upon order of the trustees of the University of Porto Rico, all moneys appropriated for the insular normal school in the budget of the department of education and unexpended at the time of said transfer of property, and equipment of the insular normal school: *Provided,* That the treasurer have the written approval for such transfer from the commissioner of education and a certified copy of a resolution of the board of trustees of the University of Porto Rico, setting forth that the university agrees to continue in operation said normal school as a department of the university without interruption to its course of study or of the privileges now extended to the regularly matriculated students of said school: *And provided further,* That said board of trustees assume all obligations and outstanding contracts appertaining to the administration of said normal school which may have lawfully been made by the commissioner of education previous to the date of said transfer.

SEC. 17. All laws, or parts thereof, decrees, or military orders in conflict with this act are hereby repealed.

SEC. 18. This act shall take effect from and after its approval.

Approved March 12, 1903.

This law was amended in March, 1905, by making the speaker of the house of delegates an ex officio member of the board of trustees, thus increasing their number by one, and providing for an executive committee to act for the board in the interval between regular quarterly meetings.

The normal school, which became the first department to be organized under the new law, was greatly strengthened in its courses and organization. An additional tract of land of about 50 acres, with a good plantation house, adjoining the normal school property, was purchased at public sale in June, 1903. The house is now used as the residence of the director of agriculture, and is a

dormitory for some 20 students in the agricultural department, which was established in June, 1904, and formally opened in September of the same year.

Great care was taken in drawing the law to conform to the conditions which Congress would impose if it saw fit to extend the benefits of the Hatch and Morrill acts to Porto Rico, and an amendment to a bill then pending in Congress relating to Porto Rican matters was introduced in 1903 extending the provisions of those acts to Porto Rico. That bill has passed both the Senate and the House of Representatives in Washington without opposition, but at different sessions. Owing to the pressure of other business it has been impossible up to the present time to get the bill considered in both Houses of Congress at the same session, though an earnest effort has been made by Senator Foraker and the Porto Rican Commissioner, Mr. Degetau, in the House, and by other friends of Porto Rico in both Houses. The present Porto Rican Commissioner at Washington, Mr. Tulio Larrinaga, will renew these efforts, and the bill will be introduced again at the next session of Congress with good hopes of success. When it becomes law the agricultural department will receive from $30,000 to $40,000 per annum from the Federal Treasury, and this will be the first direct aid given by Congress to the educational work in Porto Rico. It will be sufficient to start a much-needed and a most promising department of our work, one which it is hoped will not only give the agricultural interests of the island the results of the latest scientific studies of tropical agriculture, in addition to the very valuable work that the United States Agricultural Station at Mayaguez has been doing for several years, but also bring these results more directly to the people when connected with a teaching corps that will disseminate them through pupils trained to take charge of the agricultural rural and the regular rural schools. As we have already pointed out, it is the lack of properly trained native teachers of agriculture that has retarded the growth of the agricultural rural schools and has made the results obtained in them much less than was expected at the outset.

The need for professional schools in medicine, engineering, and law has not yet been met, but the university organization is now in shape to take up the question and to open these departments as soon as the necessary financial support can be obtained. Some of the best-educated and most patriotic Porto Ricans are members of the university board. They may be able to appeal for endowment to those who have acquired large private wealth in the island, and the Americans on the board and the government officials will doubtless improve every opportunity to present the strategic value which a great pan-American university, situated on American territory in the Tropics, would have as a means of training men in American culture and a knowledge of American political and social institutions, to more adequately represent us in all the relations we sustain to the peoples of Latin-America and of all the countries to the south of us, with whom our relations in the future are bound to increase in importance. We do not understand the Latin-American and he does not understand us. What more important patriotic work lies at our door if we think for a moment of the diplomatic problems of the next century in the great Republic, and what better institution can be devised for accomplishing that work than a great university where American and Spanish scholarship might meet on common ground and exchange the best products of two equally great, but radically different, civilizations, the one at present in the ascendency, but not too self-confident to profit by the brilliant past of the other? San Juan is also no mean city to be the seat of such an institution. When the Isthmian *Canal is completed* the world's commerce will pass to and from the ports of *Europe and those of the Pacific*, while our coast trade with South America must

needs find it a port of growing importance as a transshipping station. The private philanthrophy which showers its gifts on the colleges and universities of the home land may well look to the University of Porto Rico when it seeks even more profitable investments, measured in terms of growth, character, and human usefulness.

VIII. PORTO RICAN AND AMERICAN TEACHERS.

The teacher is the true measure of the strength or weakness of any school system. No account of the Porto Rican schools is even measurably complete without special consideration of the work of the native teachers and their relations with their American colleagues.

During the past five years we have had on the average from 1,000 to 1,400 different teachers employed each year, of whom approximately seven-eighths each year have been Porto Ricans and one-eighth American, two-thirds of the Porto Ricans being men and one-third women, while just the reverse proportion in the sexes held good for the Americans; 8 per cent of the Porto Ricans were colored.

The Porto Rican teachers are for the most part ambitious young persons, and the women are making relatively greater progress than the men. They are not lacking in industry and perseverance. They have had meager advantages in their preparation, and they suffer from the lack of stimulating companionship. Most of them are deprived of the aids that come from good libraries, lectures, and music. The difficulties of transportation can scarcely be appreciated by us in the north, and hence the impossibility of frequent teachers' meetings, institutes, and like agencies for mutual helpfulness. Many superintendents are not able to see all of their teachers as often as once a month in term time. But they grasp eagerly at any opportunities that are offered them for self-improvement. Most of the old teachers' licenses were such unreliable indexes of merit or attainment that it was necessary to begin with a new system and issue teachers' licenses for one year at a time, whether granted upon examination to new teachers or upon the basis of old diplomas and teaching record. These new licenses were renewed from year to year upon the recommendations of the district superintendents. This put each teacher on his mettle and gave the superintendent a firm control. It doubtless worked a hardship in individual cases and caused considerable discontent. Complaints were always patiently heard by the commissioner or his representatives in San Juan, when made either in writing or in person, and frequently the decisions of superintendents were overruled. I believe that the system was a necessary step in the normal development and on the whole did no injustice. The codified school law of 1903, which still obtains in the island, gives the general qualifications and classification of teachers as follows:

SEC. 35. Teachers of schools in Porto Rico shall be designated as rural, graded, teachers of English, principal teachers and special teachers, the latter class comprising kindergarten teachers, music and drawing teachers, teachers of sloyd, teachers of trades and special subjects in industrial schools, teachers in the normal and high schools and special schools, teachers [teachers of] stenography and typewriting, and all other teachers not otherwise classified who may at any time be employed in school work under the direction of the commissioner of education. They shall all be persons of good moral character and possessed of the necessary requirements for their several positions as may be prescribed by law and certified to by a certificate or license to teach issued by the department of education over its own seal and the signature of the commissioner.

SEC. 36. Teachers shall pass an examination for a license to teach in the rural schools of Porto Rico in: (1) English language, (2) Spanish language, (3) arithmetic, (4) geography, (5) history of the United States and of Porto Rico, (6) methods of teaching.

SEC. 37. Candidates for a license to teach in the graded schools of Porto Rico shall pass an examination in: (1) English language, (2) Spanish language, (3) arithmetic,

(4) geography, (5) history of the United States and of Porto Rico, (6) methods of teaching.

SEC. 38. Candidates for a license to teach as principal teachers shall pass an examination in all of the studies for a license to teach in the graded schools and in addition thereto in: (7) Algebra, (8) geometry, (9) physiology, and such additional studies as the commissioner of education may require: *Provided, however,* That no additional studies shall be required without giving at least six months' notice of such additional studies. Licenses to teach as a principal teacher may be granted without examination on the basis of a certificate of graduation from the insular normal school or from any other accredited normal school, college, or university: *Provided,* That such applicant possesses also an elementary knowledge of the Spanish language, to be tested by examination.

SEC. 39. No person shall be granted a license to teach in a rural school who has not attained the age of seventeen years. No person shall be granted a license to teach in the graded schools who has not attained the age of nineteen years, and who has not had at least one year's experience as a teacher. No person shall be granted a license to teach as a principal teacher who has not attained the age of twenty-one years, and who has not had at least two years' experience as a teacher: *Provided, however,* That any person who has finished satisfactorily a two years' course in the insular normal school of Porto Rico (exclusive of the preparatory year) may be granted a license to teach if he possesses the other qualifications, without having any other experience as a teacher: *And provided, also,* That any person who has completed the full three years' course in the insular normal school of Porto Rico and has received a diploma from said normal school shall be entitled to receive a license to teach as a principal teacher without further examination or further requirements upon reaching the age of twenty-one years and having had one year's experience as a teacher in the schools of Porto Rico.

SEC. 40. Teachers of English shall be graduates of a first-class high school, normal school, college, or university, or a teacher of extended experience holding a high grade certificate from some State of the United States, or they shall pass an examination in the English language, including writing, spelling, reading, and grammar, arithmetic, geography, history of the United States, physiology, and methods of teaching. In every village and city maintaining a graded system of schools there shall be at least one teacher of English and as many more as the commissioner of education may appoint. All teachers of English shall be selected and appointed by the commissioner of education and shall perform the duties he may assign to them. But in all other respects they shall be subject to the same conditions and regulations governing graded teachers.

SEC. 41. No license to teach in the public schools of Porto Rico shall be issued to any person over sixty years of age.

In 1904 we made a change in the system of licenses, by which a teacher whose license had been annually renewed for three years could be renewed for a further period of two or three years at the discretion of the commissioner, and if so renewed for the longer period the teacher could not be removed from his school by the local school board during the period of such renewal, except upon charges and for cause. Such renewals for the longer period were made in many cases for the year 1904–5 upon the record of work done during the previous three years, for which the written reports on file in the department are reasonably complete.

Another requirement as a condition of renewal which is strictly adhered to is that every Porto Rican teacher must take an examination annually in the English language and show reasonable progress from year to year. A similar requirement is made of American teachers with respect to Spanish, though it has been enforced in a different way.

Porto Rican teachers are elected by the local school boards from approved lists of licensed candidates, which are first submitted to the commissioner for approval. The board may submit a hundred names for approval, if it so desires, even if it has only five vacancies to fill, so that its choice is limited by this plan only by the number of licensed persons in the island. After election the board signs the contract with the teacher in the form prescribed by the commissioner, who then passes upon it, and if he approves it the *salary specified* is paid by the insular department, though the board is required *to pay an additional* monthly allowance, known as house rent, which amounts

in reality to a small part of the salary being paid by the local board. The idea of house rent is a survival from the period when some teachers were allowed to live in the schoolhouses and those who were not were granted a money equivalent.

The rates of pay are fixed by the commissioner within limits set by the legislature, but must be uniform for like grades of teaching. The rural teachers of the third class—that is, those who have taught less than three years—receive $25 per month salary and from $3 to $8 per month house rent; those of the second class—that is, those who hold diplomas or special certificates from the Insular Normal School, irrespective of the length of time they have taught, and all licensed teachers in actual service in 1902–3 whose licenses were renewed for 1903–4—receive $30 per month salary; and rural teachers of the third class—that is, with five years' teaching experience—after July 1, 1903, will receive $35 per month salary. The house-rent allowance remains the same for all three classes and salaries and house rent are paid for nine months. Graded teachers receive: First class, $55; second class, $50; third class, $45 per month salary, with house rent from $10 to $15 per month. Principals receive: First class, $70; second class, 75; third class, $80 per month salary, with from $10 to $15 per month house rent.

Teachers of English are not divided into classes, but are paid $50 per month and house rent, the same as graded teachers. They are treated in all respects, as to salary, regulations, etc., as graded teachers. It has worked some hardship and injustice to the American teacher, who has to pay on the average at least $100 per annum for traveling expenses if she wishes to go home to the States in the summer—and this she ought to do in order to be in the best physical condition for the next year's work. During her residence in Porto Rico she must also necessarily pay more than the native teacher for board and living expenses. The only offset has been the opportunity of giving private lessons in English. Some of the American teachers have been compelled to do this to an extent that impaired their health. One year we tried to equalize this matter by granting American and Porto Rican principal teachers who spent the long vacation in the United States a travel allowance of $100, payable upon vouchers after their return to their posts, but the plan did not work well. Now the American teacher who is reappointed for a second year receives $60 per month salary for the second year and all successive years. This represents an increase of $90 for the year, and helps to hold good teachers who are easily worth the difference after the first year's experience.

The salaries of special teachers are fixed by legislative enactment at the time such work is authorized, or in the annual appropriation bill separately itemized, or by the commissioner, subject to the approval of the executive council, if paid from general items of appropriations.

The Porto Rican teachers work hard to equip themselves for the best paid positions. Most of them are married, with large families dependent on them for support. They are extremely poor and can not, as a rule, leave their homes for any length of time to avail themselves of opportunities for study or self-improvement. For two years summer normal courses were given at San Juan or at the insular normal school, but this plan was given up as unsatisfactory. Frequent conferences in the larger towns are held by those sent out by the department or by the district superintendents, and for two years a system of institutes has been successfully carried out. An institute is held for a period of three days to one week in each superintendent's district. The schools are closed, and all teachers in attendance receive full salary for the time they are excused from their schools.

During the summer of 1904 a study trip to the United States was arranged, and 540 Porto Rican teachers spent five weeks in summer study at either Harvard or Cornell University and one week in travel seeing the cities of Boston, New York, Philadelphia, and Washington. A special act of Congress gave us free transportation on two army transports. Each teacher who joined the expedition contributed one month's salary, which yielded $21,175, to a special fund, to which the citizens of Boston, New York, and Philadelphia by public subscription contributed the further sum of $15,600, making in all over $36,000, which paid the board, tuition, land travel, and incidental expenses of the trip. Small as was the financial outlay demanded of the teachers, when we consider that many of them had to make provision for their families during their two months' absence it is a remarkable sign of their earnestness of purpose that nearly one-half of the entire native teaching body of the island participated in this expedition. They are still writing, lecturing, and talking about their experiences, and the results for good are easily noticeable in every schoolroom in the island, in those of teachers who could not go, as well as in those of teachers who came back with a new sense of what the Americanization of Porto Rico may mean for the people of Porto Rico, depending, as President Roosevelt said to them at the White House, upon how they and their colleagues do their work, which in turn will largely determine whether the next generation of Porto Ricans shall perform well or ill their work in the world.

The American teacher in Porto Rico is entitled to no small measure of praise. At the outset there were some unworthy representatives of our schools at home, adventurers who came for selfish reasons to see a new country or to get an introduction to business opportunities or because they could fill no place at home. Such unworthy teachers were soon weeded out. Nothing but the highest standard of service and the true teacher-missionary spirit is wanted, and we have succeeded in getting that to an extent that far exceeded our expectations. During the year ending in June, 1904, there were 164 American teachers employed—58 men and 106 women—of whom 145 were in service at the end of the year. Fifty-seven of these were graduates of colleges or universities, 38 were normal school graduates, and 38 more graduated from a high school in the United States. Application blanks are furnished to all who apply for them. When properly filled out, giving full information concerning the schooling of the applicant, teaching experience, age, and physical qualifications, and accompanied by a photograph, they are carefully scrutinized, the applicant's references are communicated with by correspondence, and, if satisfactory, the applicant is appointed for one year on trial. Few persons are appointed who have not had teaching experience of several years in some good school in the States. Seventy-eight of the American teachers employed in 1903–4 came from Massachusetts, New York, and Pennsylvania, and most of them had extended experience in the schools of those States, while 27 States were represented. As a body they are faithful and worthy representatives of the great Republic, and the future relations of the "Pearl of the Antilles" to the new mother country will be largely determined by their work and influence.

IX. PORTO RICAN STUDENTS IN THE UNITED STATES.

The question has often been asked whether it would not be wiser to spend all the money available for any form of secondary education in sending young Porto Ricans to the high schools, professional schools, and colleges in the United States, rather than to attempt to organize any instruction of this grade in Porto Rico. The answer which a careful study of all phases of the question has invariably brought is that both lines of effort must be made. They meet different

sets of conditions, reach different groups of students, equally deserving of assistance, and are not alternatives at all.

While the transports of the military government were still plying between San Juan and New York, arrangements were made by the first commissioner of education under the civil government to send a group of over 60 Porto Rican boys and girls to the United States Government school at Carlisle. Some of these boys and girls are still there, and nearly all have done well; but under a recent ruling of the Department of Indian Affairs no more appointments of Porto Ricans can be made to Carlisle, not even to fill the vacancies caused by the withdrawal of Porto Rican students at the institution, and those who return to their homes in Porto Rico during vacations are not allowed to go back to Carlisle.

The first legislative assembly in Porto Rico voted the sum of $15,000 to send and maintain 45 students in the States for a year, and this appropriation has been continued each year since 1901. These boys and girls are sent under the following provisions of the codified school law, which vary but little from the original law creating these traveling scholarships:

SEC. 68. There shall be selected annually, as hereinafter provided, a number of poor young men of robust constitution and good conduct, who shall be sent to the United States and maintained there at the expense of the people of Porto Rico for a period not to exceed five years devoted to the study of such subjects as the commission hereinafter provided may determine. The number of young men upon whom this privilege shall be bestowed shall at no time be in excess of 25, and the total expenses in each case shall not exceed the sum of $400 per annum. The young men thus selected shall be sent to the United States as soon as provisions have been made for them in accordance with this act.

SEC. 69. The president of the executive council and the speaker of the house of delegates, together with the commissioner of education, shall form a commission that shall prepare the rules under which these young men shall be selected, and shall have charge of them during the time they are engaged in study under this act.

SEC. 70. The commission shall keep regularly informed of the conduct and progress of each beneficiary and secure all other data that they may consider necessary. They may also withdraw support from any beneficiary upon proper proofs being presented of misconduct or bad faith of any beneficiary under this act.

SEC. 71. By and with the recommendation of the commissioner of education for the island of Porto Rico there shall be maintained each year twenty good and worthy young men and women from Porto Rico in the United States, to be educated in the various arts and trades that may best qualify them to assist in the improvement of conditions of Porto Rico.

SEC. 72. Each person receiving said appointment shall receive from the general government of Porto Rico a sum not to exceed $250 per annum, and shall pursue the studies or trades as agreed upon by the said commissioner of education and the applicant before finally receiving said appointment.

SEC. 73. The colleges or institutions designated to which the said students shall attend are Hampton Institute, Hampton, Va., and Tuskegee Institute, Tuskegee, Ala., and such other similar educational institutions as the commissioner of education may from time to time specify.

SEC. 74. The commissioner of education shall have the right to cancel or withdraw the support at any time upon proper proofs being presented of misconduct or bad faith of any of the beneficiaries included under this act subject to the approval of the executive council.

SEC. 75. There shall be sent to the commissioner of education from the authorities of the college or institution at which the said students are in attendance a quarterly report of the conduct and advancement of each student so attending.

SEC. 76. The students who may receive the appointments shall at no time exceed twenty in number, ten young men and ten young women, and no one shall receive the benefits of this act for a longer term than four years.

SEC. 77. The twenty beneficiaries referred to in section 72 [71] shall in no case be sent from the same district or county, and the commissioner of education shall therefore confer this favor with the greatest equity among all the young persons of the island. A necessary qualification shall be that the parents of the beneficiaries shall be poor.

One important modification in the above law was made by the legislature *of 1904, which* required that henceforth only graduates of the eighth grade of

the public schools of Porto Rico should be eligible to appointment for the $400 scholarships, and further provided that under certain conditions a limited number of young workingmen might be sent to shops and factories in the States, where they might be employed so as to learn trades and their earnings might be supplemented by scholarship allowances.

The reports received of the standing of these young people in their respective schools have been of the most satisfactory sort. Selected as they were on competitive examinations, these students were undoubtedly among the best-prepared pupils in Porto Rico, but it was hardly expected that their preparation would enable them to stand on a par with our best American students. Yet this has been the case, and in many instances Porto Rican pupils have received the highest standing given in their various classes. Several have graduated from our best preparatory schools and won scholarships at our best American universities. Eighteen of these students at the close of the academic year 1903–4 had spent three years each in the States and were then doing well at the following institutions: One each at Haverford College, Rutgers, Cornell, Wesleyan, Cushing Academy, Albany Medical College, Pennsylvania State College, Massachusetts Institute of Technology, University of Michigan, University of the City of New York, University of Maryland (medical school), Worcester Academy, Deichmann School (Baltimore); two at Jefferson Medical School, and three at Lehigh University. Four more were in their first year at Northwestern, Juniata College, and Pennsylvania State Normal School. Thirteen were at Tuskegee Normal and Industrial Institute, three at Tougaloo University, and one at Jasper, N. Y. The remaining six places were filled by new appointees who had not yet left Porto Rico.

With a very few exceptions no occasion for discipline has arisen, and these young boys and girls have proven themselves worthy recipients of public aid. Many have scored most unexpected academic victories, and all are pledged to return to Porto Rico to do their share in the uplift of their fellows. It is to be regretted that the financial resources of the island will not permit the expenditure of a larger annual sum than $15,000 in this excellent experiment.

X. INSULAR LEGISLATION FOR EDUCATION—FINANCIAL RESOURCES—COST OF SCHOOLS.

The military government instituted in October, 1898, came to an end April 30, 1900, and the act of Congress providing civil government for Porto Rico went into effect May 1, 1900. The civil duties of the military authorities were performed with such great efficiency on the whole that many of the most intelligent Porto Ricans and most Americans in the island would have been glad to have seen the period of military rule extended for a few years, until the Porto Ricans had become more familiar with efficient public administration before being called upon to legislate for themselves and to execute their own laws. But public sentiment in the United States was naturally impatient to see more democratic institutions established than are possible under military government. Under the organic act for Porto Rico, which went into effect on May 1, 1900, the powers of government under Congress, and subject to a certain control or veto power retained by Congress, were vested in a governor and six heads of executive departments (the secretary, the attorney-general, treasurer, auditor, commissioner of interior, and commissioner of education) and a legislative assembly consisting of two houses—the executive council, composed of the six heads of departments and five other members, all appointed by the *President of* the United States, by and with the consent of the Senate, and the *house of delegates, composed* of thirty-five members, to be elected by the people

of Porto Rico, five from each of seven electoral districts. At least five members of the executive council must be Porto Ricans, and the governor is also appointed by the President of the United States for a term of four years in like manner as the members of the executive council.

The first election for members of the house of delegates was held in November, 1900, and the first legislative assembly was organized in December, 1900, and sat for sixty days (until February, 1901). Since that time no law has been or can be enacted without the approval of a majority of all the representatives elected by the people as members of the house of delegates and the approval of a majority of all the members of the executive council, appointed by the President of the United States, and the approval of the governor.

It would carry us beyond the scope of this paper to attempt to estimate the character of all the legislation enacted by this insular legislature in the five regular and two extra sessions already held. Not even all the enactments on the subject of education can be examined here, although I think that the work of these legislative assemblies would not suffer in comparison with other legislative bodies if judged by this standard.

A good school law was enacted at the very first legislative session, and remained in force, with minor modifications and additions, for over two years, after which it was made the basis of a more comprehensive statute known as the codified school law of 1903, which is still in force, with slight additions and modifications.

The organic act centralizes the control of the schools very largely in the hands of the commissioner of education, and the codified school law in conformity therewith defines the powers of the commissioner, in sections 2 and 66, as follows:

SEC. 2. The commissioner of education is hereby authorized and directed to establish and maintain a system of free public schools in Porto Rico for the purpose of providing a liberal education to the children of school age—i. e., between the ages of five and eighteen years; to establish higher institutions of learning, including colleges, universities, normal, industrial, mechanical and high schools, together with such other educational agencies as said commissioner may find necessary and expedient in order to promote the educational development of the island. In addition to the rural and graded schools which shall constitute the regular common school system, said commissioner is hereby authorized and directed to establish, maintain, and direct, so far as the resources placed at his command will permit, such special schools as in his judgment are necessary to meet special educational needs, such as kindergarten schools, night schools, agricultural schools, professional and commercial schools, and schools in penal and charitable institutions, either under private or public management, where the same can be maintained in general harmony with the public school system and in harmony with its general standards, provided that the pupils in said special schools may include others than those of school age. The commissioner of education, the assistant commissioner, the secretary of the department, and the general superintendent of schools shall have power to administer oaths and take sworn testimonies on school matters.

SEC. 66. The commissioner of education being required by act of Congress of April twelve, nineteen hundred, to supervise education in Porto Rico, he shall, to comply with said act, approve all disbursements made on account thereof; he shall appoint from time to time supervisors or superintendents of schools, who shall be subject to the commissioner in all respects; he shall prepare and promulgate all courses of study for the school [schools]; he shall conduct all examinations for teachers' certificates and issue licenses or certificates to teachers; he shall fix the salaries of teachers, provided always the amounts so designated shall not be in conflict with law; he shall select and purchase all school books, supplies, and equipments necessary for the proper conduct of education, except as otherwise provided by law; he shall approve all plans for public school buildings to be erected in Porto Rico; he shall require and collect such statistics and reports from school boards, superintendents, and teachers as he may from time to time deem necessary to the welfare of the school system, and he shall formulate such rules and regulations as he may deem necessary for the effective administration of his office.

The law then provides for the election of three school directors as a school board in each municipality or county, defines their qualifications, requiring that they be citizens of Porto Rico or of the United States, residents of the school district in which they are elected for at least six months previous to such election, and able to read and write. The chief duties and powers of school boards are defined in sections 5 to 18, inclusive, as follows:

SEC. 5. On the first Monday after the first Sunday in January following a municipal election the school board shall meet in ordinary session and proceed to the election from their own number of a president and a secretary, certifying said organization and officers to the commissioner of education. They shall in like manner proceed to the election of a treasurer, who may be the treasurer of the municipality, but who shall not be a member of the school board, and who must be a duly qualified voter of the municipality. The election of said treasurer shall be certified to the commissioner of education in like manner as that of the president and secretary. The treasurer of the school board must conform in every condition and respect to the regulations provided by law for the regulation of duties of treasurers of municipalities. He shall pay only such amounts as are authorized by warrants signed by the president and the secretary of the school board, and no account shall be allowed unless previously ordered at a regular or duly called meeting of the said school board, and the date of said meeting shall be stated in the warrant. He may be paid an annual salary by the school board in such amount as is provided for in the budget of the school board and duly approved by the commissioner of education, but said salary shall not exceed two per centum of all funds actually disbursed by said officer. The president and secretary shall perform such duties as usually appertain to such offices, and shall make such report to the commissioner of education as he may from time to time require.

SEC. 6. Immediately upon its organization the school board shall fix a regular date upon which to meet each month. Special meetings may be called upon three (3) days' notice being given and signed by the president of the board or by any two (2) of the members of the board or by the school superintendent of the district. The board shall meet monthly, or oftener, as required, and all meetings shall be held in the alcaldia or other public place, and two members shall constitute a quorum. The school superintendent of the district is ex officio a member of the school board and entitled to participate in its discussions; to receive notice of its meetings, to examine its minutes, records, and accounts in like manner as a duly elected member of the board, but he is not entitled to a vote.

SEC. 7. School boards shall have charge of all school buildings in their respective districts; they shall have the power to erect, repair, remodel, and improve school property, rent buildings for school purposes, provide suitable furniture and equipment for the same, employ janitors for school buildings, repair and keep in order suitable outbuildings, pay house rent for teachers, and keep in order all school buildings in their respective districts. They shall have the custody of and shall keep in repair all school buildings erected by the insular government, although the title to the same is vested in the people of Porto Rico, so long as said buildings are used for school purposes, and in general they shall perform such duties as the commissioner of education may require in accordance with the school laws.

SEC. 8. The school board of each municipality may hold in the corporate name of the municipality the title to lands and other property which are now owned or may be acquired for school purposes in such districts, and no property so held by the school directors for school purposes shall be subject to taxation.

SEC. 9. Whenever the purpose of a meeting of the school board or of a municipal election is to authorize taxation or indebtedness for school purposes, such meeting or election shall not be legal for such purposes unless its object be advertised, together with the time and place of such meeting or election for at least thirty (30) days previous.

SEC. 10. Whenever the school board provides but one school building in any urban center of a municipality even though said building contains more than one class, each and every class thus maintained shall be open to both sexes, and likewise all rural schools. When, however, in any urban center there is more than one school building provided and said buildings are no more than one kilometer distant from each other, one building may be devoted to classes for boys and the other to classes for girls, if the school board so desire. All schoolhouses and class rooms shall be entirely separate and upon different premises from the residence of the teacher or any other family, or from any place of business.

SEC. 11. Whenever it shall become necessary for a school board to acquire a site for a *school building* or for an addition to a schoolhouse site and the same can not be *acquired by agreement of* sale with the owners thereof, the board is hereby given the *right of eminent domain* to proceed to condemn said property for school uses. The

method employed in said condemnation proceedings shall be in accordance with the law of eminent domain then in force.

SEC. 12. A school board in a municipality in its corporate capacity and organized in accordance with this act may sue and be sued in the name of the board.

SEC. 13. The school boards shall see that all public schools supported by public taxation, either local or insular, are known as public schools and that admission to them shall be free of all charge. It is, furthermore, the duty of the school board to see that no teacher accepts fees for instruction given in the public schools during school hours.

SEC. 14. Whenever proper school quarters are not provided by the school board within ten (10) days from the receipt of notice from the commissioner of education that such quarters shall be provided, the commissioner, through the school superintendent of the district, may contract for the use of a suitable building or rooms for the public school in question, and such contract shall be recognized as valid against the school board in whose jurisdiction the school is located, and suit for the amount of said rent may be brought against the school board by the owner of the property thus rented in any court of competent jurisdiction, and if judgment be in favor of the claimant, such judgment shall be recognized as a legal claim against said school board.

SEC. 15. If the school board fail to provide teachers for the schools, or if vacancies occur during the school year, and the school board fail to fill the same within fifteen days after notice from the commissioner of education that such appointments should be made, the commissioner shall appoint the teachers, and such appointments shall be valid for the remainder of the school year.

SEC. 16. The school directors shall have the right to visit their schools as frequently as possible, and to report to the district superintendent on the work of any teacher. They shall supply the necessary school equipment in accordance with the recommendations of the school superintendent, cooperating with the latter to remedy all defects noted. If the school board does not remedy the defects in school equipment, the superintendent may bring the matter officially to the attention of the commissioner of education, and the board shall cooperate with the department of education in promptly removing any unsatisfactory conditions in the schools.

SEC. 17. The school boards shall supply desks, school furniture, bookcases, chairs, and desks for teachers, clocks, proper receptacles for drinking water, supplies for janitors, and all other necessary equipment for the schoolroom, except text-books and such stationery supplies as the department of education may furnish, for the schools of their respective districts, and they shall provide suitable storerooms in such towns as the district school superintendent may indicate for the safe custody of schoolbooks and supplies, and shall pay the cost of transportation of said books and supplies to and from said storerooms to their schools whenever it may be necessary, or whenever directed to do so by the commissioner.

SEC. 18. The location or assignment to a particular school of a teacher within the jurisdiction of a school board shall be determined by said board and the school superintendent of the district. In cases where the school board and the school superintendent fail to agree, the matter shall be referred to the commissioner of education, whose decision, after due and proper investigation of the facts in the case, shall be final. This rule applies only to the location or assignment of teachers who shall have been duly nominated by the school board, approved by the commissioner of education, and elected by the school board.

Further provisions of law relating particularly to school boards are found in sections 25 to 30, inclusive, and in sections 42, 58, and 59, as follows:

SEC. 25. The secretary shall record the proceedings of the school board in a book provided for that purpose. He shall enter therein copies of his report made to the school superintendent or to the department of education, and keep and preserve carefully all records, books, and papers belonging to his office, and deliver the same to his successor in office; he shall act as secretary of the district in all its meetings, or, if absent, record the minutes of the secretary pro tempore; his minutes shall show all disbursements authorized by the school board, and he shall keep an account of all expenses of the schools and schoolhouses and record the cost of outbuildings, fences, and all the conveniences of the schoolroom, such as charts, maps, blackboards, and school libraries, provided by the board. He shall issue vouchers for all amounts owed by the board, as shown by the disbursements authorized in the minutes, when they become due, which vouchers, when countersigned by the president, shall become orders upon the treasurer of the board for their face value. Each voucher shall be dated and numbered and shall state the service or consideration for which it was drawn and the names of the parties rendering such service or consideration, and shall be recorded by the secretary in a book kept by him for that purpose.

SEC. 26. Section 207 of the Political Code is hereby amended in so far as it applies

to school directors who desire to resign from office, and said school directors are hereby required to send their resignation in writing to the commissioner of education, who must act upon the same within ten days after its receipt.

SEC. 27. When a school director is accused of any felony or crime under the laws of Porto Rico he shall be suspended from the position he holds by the commissioner of education, and if he is convicted of any crime or felony, he shall be permanently dismissed from his position and the commissioner shall appoint a substitute.

SEC. 28. The commissioner of education shall also suspend or dismiss from his position a school director for offences committed in the performance of his duty as such director after having preferred charges of the offences in writing, copies of which charges shall be sent to the person against whom said charges are brought, to the members of the school board of the district, to the mayor of the municipality, and to the supervisor [superintendent] of schools of the district: *Provided,* That a reasonable length of time shall be given in which the interested person may present to the commissioner of education a written answer to the charges: *And provided further,* That at the expiration of said time the action of the commissioner shall be stated in writing and copies of the same shall be sent to the same parties who were entitled to receive copies of the charges preferred. A certified copy of the action taken by the commissioner of education, together with a copy of the charges preferred and any answer which may have been filed, shall be placed together on file in the records of the department of education.

SEC. 29. Vacancies in the school board, whether caused by death, resignation, removal from the district, failure to attend stated or called meetings for two consecutive months, or removal by the commissioner of education, shall be filled by appointment for the unexpired term, to be made by the commissioner of education within one month of the date when said vacancy occurred: *Provided,* That no one shall be thus appointed who is not a qualified voter of the school district and who is not certified as a member of the same political party as the immediate previous incumbent of the position which it is desired to fill. A written statement of the president of the party or any two members of the executive committee of the party shall be considered sufficient evidence that the appointee is a member of the party as stated: *Provided further,* In cases where no member of the party of the previous incumbent who possesses the qualifications required by law for the office of school director can be found who is willing to serve in said position, then the said commissioner of education may appoint anyone qualified to fill the position, without reference to his political status.

SEC. 30. Each school board shall annually on or before June first make a report to the commissioner of education, specifying the number of schools they desire to open in their district for the next ensuing school year. This report shall specify the number of rural, graded, principal, and English teachers required, and also the number of special teachers or teachers of special schools, such as agricultural, kindergarten schools, night schools, etc., required, and the commissioner of education shall at once proceed to consider such report, informing the respective school boards not later than July first of the number of schools and teachers that may have been assigned to their respective districts.

SEC. 42. Teachers shall be suspended from their positions by the commissioner of education or by the school board for cruelty, immorality, incompetency, insubordination, or negligence in the performance of their duties, and said commissioner may reinstate them or dismiss them and cancel their licenses after an investigation which shall be held and in which the school board may file a statement and said teachers shall be held [heard] in their own defence, either verbally or in writing: *Provided,* That no suspension by a school board shall be valid for more than five days; and the teacher thus suspended shall not be again suspended for the same cause by said board during the school year in which the first suspension took place.

SEC. 58. Municipalities shall provide rooms or buildings for schools and necessary offices for school boards and district school superintendents wherever public buildings in the control of said municipality are available for such purposes. Wherever possible, the municipality shall construct public school buildings erected and furnished according to plans authorized by the commissioner of education and suitable for graded schools. Where the municipality provides such building, additional teachers sufficient for six grades will be furnished as needed.

SEC. 59. From the school funds at their disposal the school boards shall pay the house rent of teachers. The school boards shall make a cash allowance to teachers for house rent as follows: For rural teachers, not less than three dollars per month and not more than eight dollars per month for each and every school month in which the teacher is actually engaged; graded, principal, and special teachers, not less than ten dollars nor more than fifteen dollars per month for each and every school month in which the teacher is actually engaged. Said rent of [or] allowance shall in every case be made a *part of the contract* or agreement between the teacher, the school board, and the commissioner of education, all of whom shall agree to the rent or allowance so specified.

To provide the school boards with the necessary funds to carry on the business with which they are charged, each municipality is assessed by the treasurer of Porto Rico in accordance with the provisions of the general revenue act, so that about one-fourth of all local revenues are paid directly to the school boards for school purposes, and the municipal councils may and sometimes do increase this amount by levying in addition a special school tax not to exceed one-tenth of 1 per cent on the valuation of all real and personal property in their respective districts.

The school boards are held to very strict accountability for all funds in their hands, and their accounts are rendered on forms prescribed by and subject to the approval of the commissioner.

The provisions of law relating to teachers and to scholarships have been quoted already in other sections of this paper, and it only remains in order to complete our reference to the chief provisions of the codified school law to say that it provides for compulsory attendance after a pupil is once enrolled in a public school and gives the municipal authorities power to enforce the attendance of children between the ages of 8 and 11 years where a school exists within a reasonable distance of their residence and is not full. More stringent compulsory-attendance features would have been enacted had the school accommodations been adequate.

Section 61 of the codified school law relates to the district superintendents of schools and places them under the direct orders of the commissioner, whose representative they are, and makes them ex officio members of the school boards in their respective districts, with rights of participation in discussion but no right to vote. The school boards are required to furnish superintendents with a local office.

The school law also provides for the annual celebration of arbor day on the last Friday in November.

The most important legislation for schools, however, is not that to be found in the school law, but rather the provision for schools made in the annual appropriation bills.

The total funds available for school administration, including all expenses of maintenance, rent of school buildings, outlay for buildings constructed each year, salaries of teachers, and administrative expenses of the insular department of education have been $980,629.69, $818,149.47, $900,169.41 for the three fiscal years 1901–2, 1902–3, and 1903–4, respectively. The sources from which these amounts were derived and the actual expenditures under these appropriations are conveniently summarized in the following tables:

I. *General summary of appropriations and expenditures, department of education, for the years 1901–2, 1902–3, and 1903–4.*

	1901–2.	1902–3.	1903–4.
Total appropriations:			
From insular funds	$525,420.00	$565,147.14	[a] $657,775.50
From trust fund donated by United States Government.	337,000.00	[b] 103,085.87	[c] 59,810.80
Total expenditures:			
From insular funds	481,686.08	[d] 579,716.18	[d e] 619,167.43
From trust fund	209,115.81	90,312.21	79,700.03
Total expenditures by school boards from insular funds not included in above appropriations, but expended under supervision of department of education	118,209.69	149,916.96	182,583.11

[a] Including appropriation for university (Insular Normal School), but not the appropriation for the San Juan Free Library.
[b] Including repayments from municipalities amounting to $585.37.
[c] Including repayments from municipalities amounting to $12,234.30.
[d] Including expenditures from available balances from appropriations made in previous year.
[e] Including expenditures for the university (Insular Normal School), but not for the San Juan Free Library.

II.—*Résumé of expenditures, department of education, for fiscal years 1901–2, 1902–3, and 1903–4.*

	1901–2.	1902–3.	1903–4.
I. GENERAL EXPENSES.			
Office of commissioner:			
Salaries	$20,145.71	$23,311.40	$27,775.20
Contingent expenses	3,707.02	2,399.71	5,277.80
Text-books and school supplies:			
Purchases	38,272.69	39,635.87	29,936.32
Transportation	1,771.59	999.97	678.74
Common schools:			
Salaries of teachers	320,316.75	389,191.75	397,597.50
Contingent expenses (school furniture)	28,885.82	12,391.17	18,526.81
Superintendents of schools:			
Salaries	19,949.52	25,010.27	22,232.42
Contingent expenses (travel, etc.)	8,856.55	10,090.56	9,873.31
Teachers' institutes and summer normal schools:			
Salaries	3,068.00	2,580.30	6,379.87
Contingent expenses	602.35	764.87	535.53
High and graded schools:			
Salaries	10,980.00	23,757.75	31,567.25
Contingent expenses	1,071.70	603.08	1,599.93
Normal school:			
Salaries	7,963.71	11,296.37	(a)
Contingent expenses	2,732.26	1,666.02	.....
Model and practice school, salaries	.....	1,031.00	(a)
Library, department of education:			
Books and apparatus	420.43	343.94	166.79
Freight, cataloguing, incidentals	732.58	31.62	.....
Industrial schools:			
Salaries	.....	.....	17,839.73
Contingent expenses	.....	.....	7,040.13
Total of expenditures	464,478.67	545,105.67	577,026.98
Balances transferred in accordance with special laws:			
To industrial school fund	40,521.33	.....	.....
To University of Porto Rico	.....	2,661.47	.....
Refunded to treasury of Porto Rico	.....	.....	38,948.57
Total of appropriations	505,000.00	547,767.14	615,975.50
II. SPECIAL TRUST FUNDS AND SPECIAL APPROPRIATIONS.			
University of Porto Rico (total appropriation, $21,440):			
Salaries, normal department	.....	.....	15,054.52
Contingent expenses	.....	.....	1,875.30
General expenses	.....	.....	1,498.25
School extension:			
Trust funds available for construction of schoolhouses	337,000.00	231,129.56	200,628.15
Expended during fiscal year	209,115.81	90,312.21	79,700.08
Education of Porto Rican students in the States (annual appropriation, $15,000):			
Expended in fiscal year	15,000.00	14,864.64	14,010.08
Education of Porto Rican students in insular normal school (appropriation for scholarships, $5,460):			
Expended	.....	.....	4,554.78
Teachers' pensions paid from collections from municipalities	11,469.12 412.16	1,824.80	2,965.20
San Juan free library	2,136.48	2,130.71	(b)
Schools for training nurses	70.93	1,037.62	1,062.60
Industrial schools, equipment—transfer of balance 1901–2 of $40,521.33	.....	16,577.54	8,678.14
Common schools, equipment—refunds from school boards	.....	.....	406.83

a See university appropriation. b Now under separate board of trustees.

The relation which these figures bear to the total appropriations for all governmental expenses vary but slightly from year to year. Approximately 25 per cent of all revenues, both insular and local, have been voted for public education in Porto Rico by the public authorities, representing the people, at every legislative session since the beginning of civil government. One year the proportion reached 28 per cent. I doubt whether a similar showing, indicating as high a social value set on public education, can be found in any other part of the United States, certainly not in any part where there is as generally *impoverished a* condition as will be found in Porto Rico. Twice or

thrice these amounts would have been willingly voted for this purpose had the funds been available or the resources sufficient, because it was recognized that, liberal as these appropriations are, they are wholly inadequate to cope with the illiteracy bequeathed by the past. It will not take a very elaborate investigation of the facts to convince the American people that we have in Porto Rican education the most worthy object for Federal aid, if the desire to investigate can only be aroused.

Owing to the fact that the administration of the entire school system, including not only the common schools, but also the special schools, such as high schools, normal, and industrial schools, is vested in one department, it is very difficult to get at any fair estimate of the cost of any single part of the system per pupil enrolled. We might take the figures in Table II under general expenses and divide the total amounts expended each year by the total number of pupils enrolled in the common schools and also by the total average daily attendance, and we would get approximately the per capita cost of the elementary schools; but this would also include the total cost of supervision for all schools and cover what in the States would correspond to local and State supervision and administrative expenses. These figures, however, are as follows:

Year.	Total expenditures.	Total enrollment.	Cost per pupil enrolled.	Average daily attendance.	Cost per pupil attending.
1901–2	$464,478.67	59,096	$7.86	30,160	$15.40
1902–3	545,105.67	64,039	8.51	34,272	15.90
1903–4	577,026.98	[a]57,683	10.00	39,928	14.45

[a] Average for three terms, while for previous years the totals are carried through the year. This probably more than accounts for falling off.

Even making allowance for the change in the method of computing the statistics of enrolled pupils, there has probably been an increase in the average cost per pupil enrolled during the past three years, but a considerable decrease in the average cost per pupil in attendance, which is probably a better measure of service rendered. There has been unquestionably an improvement in the equipment and in the quality of teaching, which has been accomplished in part only through greater outlay in expenditures. It may be possible in time to introduce economies not advisable at the outset, by which these per capita costs may be decreased somewhat. They are undoubtedly too high now, but many items of expenditure cost more in the Tropics than they would in the States, and this fact must be reckoned with when making comparisons. Perhaps the safest judgment is that of the Porto Rican people themselves, who almost unanimously testify, in spite of many criticisms of particular items, that the general net return from all moneys spent on education has been eminently satisfactory.

XI. THE PRESENT EDUCATIONAL POLICY—RESULTS OF FIVE YEARS—THE OUTLOOK FOR THE FUTURE.

The period of radical experiments on a large scale with educational measures in Porto Rico may be said to be over. Some of the work is still in an experimental stage, and much of it will require modifications from time to time which further experience will indicate. There are still new conditions to be met, and many educational needs for which there are no available funds. The free public school of elementary grade has been established in every part of the island, and the emphasis in the present policy has been and will continue for a long time to

be laid on strengthening, improving, and increasing in number the primary schools in town and country. In the town schools the effort will be made to introduce practical industrial training, both for its educational value in the training of the hand and eye and for its utility in the possible development of home trade and skilled hand work. In both town and rural schools, and especially in the latter, the attempt is being made to arouse a greater interest in agriculture by adapting the course of study to the needs of a people so predominantly agricultural.

Every effort will be made, as it has been made in the past, to increase the financial resources of the schools. With school accommodations for only one child in five of school age in the population, the need of more funds to increase the number of schools is imperative, unless the United States is willing to have a population within its national domain eight-tenths of which is illiterate. It is scarcely possible to expect that a larger percentage of the total revenues of the island can be devoted to education than is given at present. With increased prosperity the value of taxable property will rise gradually from year to year, and the present rate of taxation, which is probably as high as a safe economic policy will permit, will yield somewhat larger returns. If the same proportion is devoted to education, the amounts available for schools will be a little larger from year to year, but can not permit of an increase in the number of schools more than sufficient to keep pace with the increase in the numbers of the school population. This will leave us no better off relatively than we are to-day. The trust funds returned by the United States Government from the receipts from Porto Rican customs are now practically exhausted. From this source alone has come nearly $500,000, which has been spent in the construction of new schoolhouses. This work should go on, and if it does, it will have to be a charge on insular revenues hereafter.

Such are the main points in the present educational policy. They can not fail to suggest many difficulties and serious problems still to be solved, but with the foundations already laid and with the determination to go ahead on the part of a people ambitious for education, a solution must be found for the financial necessities of the case, which are the most serious.

The results already obtained are most encouraging. The new commissioner, Doctor Falkner, has reviewed them in a recent article entitled "A few notable changes," published in a special number of The Porto Rico School Record, devoted to commemorating the fifth year of the establishment of civil government. Perhaps Doctor Falkner can speak of these changes after several months' study on the ground more impartially than those who took part in most of the events chronicled. His article in full is as follows:

The time which has elapsed since the American occupation has been one of earnest effort, of unremitting labor, and of rapid change in the schools of the island. It was but natural that the new government should bring with it educational ideals widely different from those of its predecessor. It was but natural that an earnest effort should be made to create here educational institutions which should embody those ideals. In such a conflict of ideals it could not be avoided that there should be much mutual misunderstanding. On the one hand the aims and purposes of the new administration could not be fully understood by those to whom their projects and actions were novel, nor could, on the other hand, the merits of the older system be fully comprehended by the new administration. At times, therefore, the actions of the latter may have been deemed arbitrary, unjust, and harsh. But this is an inevitable result of change. It is not improbable that the era of radical change has been completed, that we may look forward to an era of quiet development upon the basis already gained.

The moment may, therefore, be considered not inopportune for a survey of the changes which have been effected and a statement of what we believe the present school system stands for, the basic principles of its organization and life.

In so doing we can not fail to note the tremendous difference between our present system and that formerly in vogue in the island. These changes have been realized by the initiative of the department of education crystallizing into law with the approval of the legislature, and embodied, in fact, through the assistance of the teachers of Porto Rico. Whatever of merit in these changes may be due to the department is so largely the work of my distinguished predecessors that I may not improperly comment upon it. All change is not progress, but I should be faithless to my trust did I not believe with wholly unwavering conviction that the work of the past few years had been upward and onward. It may well be that, in seeking to summarize the changes which have occurred, my words may seem laudatory beyond the proprieties. But as we may rejoice in the present and build high hopes for the future, and yet hold in honor the steps by which we have attained our present position, so we might extol the present with its larger opportunities without grudging its meed of praise to the more restricted efforts of an earlier day. Yet it is not my purpose or function to laud and magnify, but merely to recount.

So radical have been the changes in the educational system that to recount them all would be to repeat here the successive reports of the commissioners of education since the change of government. Many aspects of our school system will be treated in this journal at length, and at this point we can do no more than call attention to some of the many changes which, in our judgment, are most significant and most indicative of the general spirit of the transformation which has been effected. Briefly, then, the changes to which we would especially direct attention are the following:

1. Schools have been increased in number. It is extremely difficult to obtain precise information with regard to the number of schools in existence under the old régime, or of the number of pupils who were actually attending such schools. According to the best information which we have there were in 1898, before the American occupation, about 500 schools in the island, attended by 22,000 children. According to the last report of the commissioner of education there were over 1,000 schools in operation in 1903–4, with 61,000 pupils enrolled in the schools, with an average daily attendance during the year of 41,798. Both the number of schools and the number of pupils have doubled since 1898 on the basis of these facts. The showing is really better than is apparent on the face of it, since in the earlier period the records were negligently kept, and we have no means of knowing how many of the schools reported were in actual operation and how many had a merely nominal existence.

Considered merely in its quantitative aspects, the significance of this advance can not be overestimated. It means not only that a much larger proportion of children has been reached by the school system than heretofore, but it means also that the school has been carried into regions before unknown. There is many a rural barrio where the school is now a daily part in the life of the people which was utterly ignorant of such an institution before the advent of the American Government. In the slow process of time such changed conditions will be reflected in the higher intellectual standing of the great masses of the people. The percentage of illiteracy as revealed by the census of 1899 will be considerably reduced when the children now enjoying the advantages of the public schools of Porto Rico shall have arrived at man's estate.

Important as the work is which has been accomplished, it is, after all, only the beginning, and the task which lies before our people is still enormous, nor should it be forgotten that the task which has been traversed is, after all, the easiest portion of the way. The schools have been able to secure this wonderful development because they have been offered freely to a people hungry for education. But as the years advance it will be necessary to appeal to classes of the population who by their position and disposition are less favorably disposed to the spread of education, and a corresponding increase in the number of pupils in future years will be more difficult to obtain than in the past. It remains none the less the duty of all who are associated with the work of education to press forward with all energy toward the day when every child in Porto Rico will be able to take part in the schools of the island and will be required to do so.

2. Schools are now entirely free. No pupil who attends a public school supported by the people of Porto Rico is called upon to pay for his instruction, nor is any teacher permitted to receive any fees for his work. Under the former rule of the island the public schools presented a curious mixture of the public and private institution. While they were nominally free to all, teachers were

permitted to take in private pupils who paid directly to the teacher. The tendency of such a system was to make in the schoolroom undesirable class distinctions and to direct the energies and attention of the teachers wholly to the children whose parents paid especially for their instruction. It is currently reported that about one-third of the children paid for their schooling, and we may be pardoned in the belief that such pupils received a good deal more than one-third of the instruction imparted.

The question involved in this apparently simple matter goes down to the very root of the theory of government. If education is a matter of purely individual concern, there is no reason why it should not be paid for directly by the persons concerned, and the services of the schoolmaster purchased like other services. If, however, education is a public duty, to be brought to the reach of all, and in which all should participate not for personal advantage only but for the public welfare, then it should be wholly a public charge and should cost nothing directly to those who participate in it.

The free public school, as we understand it, is one open on equal terms to all and without pecuniary burden to any. This absence of pecuniary burden, which to our manner of thinking is the fundamental character of the free school, extends to the supply of text-books and supplies which are loaned or furnished to the pupils without charge.

3. It has improved school methods. In the former system of instruction, memory was the principal faculty which was encouraged by the teacher. Text-books, so far as they were in use, consisted of questions and answers, and the pupil was judged most proficient whose answers showed the fewest mistakes. This has all been done away with, and the pupil is encouraged so far as his capacity goes to think for himself rather than repeat like a parrot the thoughts of others.

To accomplish this result there has been an absolute change in the text-books in use in our schools. Not only are the books better, being based all of them upon texts of wide circulation in the United States, but there are also enough for the purposes of the schools. It was the frequent complaint of former times that the local authorities charged wih providing text-books were parsimonious in their expenditures, and that in the majority of schools the number of books supplied was wholly inadequate to the needs. This improvement of the method and equipment means a great educational gain, as it permits a more intensive work, and insures that the time spent in the schoolroom is employed to the profit of the child, and that progress in real attainment is much more rapid than it could be under the system, or lack of system, which prevailed before.

4. It has improved the school buildings. Before the American occupation there were no buildings expressly erected for school purposes. In general it can be said that the schoolhouse was the home of the school-teacher and his attention to his pupils was interfered with by the cares and necessities of family life. While it was supposed that the local authorities furnished the equipment of the schools, this was only partially the case, and in many cases the teacher had to do it from his own resources.

Since the American occupation there is hardly a town of considerable size in the island which does not possess a school building erected by the department of education and specially designed for school needs. If these buildings are not always as good as they might be, they are none the less in marked contrast to the former schools or even to those now rented in many localities for school purposes. Some of the more recent buildings erected by the department are in every sense worthy of praise and are a source of pride and satisfaction to the communities in which they have been established. Whatever criticisms may have been made with respect to some of the school buildings, it should be kept in mind that they do not refer to the schoolrooms, the quarters in which the children actually spend so large a portion of their time, and which leave little to be desired.

The graded school buildings erected by the department and a smaller number of rural schools which have been built by it, have caused a marked improvement, at least in the equipment, in the rented buildings. In many cases school boards have provided such buildings with a thoroughly modern equipment in desks and blackboards, which stand in marked contrast to the older conditions. Even where the lack of necessary resources has prevented the new equipment, much has been accomplished by the provision that no part of any building used *for a school should be* occupied for dwelling purposes. Buildings constructed

as warehouses, stores, or dwellings and converted into schools are never as thoroughly satisfactory as buildings which are erected in the first instance for educational purposes, but it must be recognized that often such buildings must be used. There is great latitude in the choice, and there can be no doubt that the choice is made with greater care and wisdom than in former years.

5. It has improved the position of teachers. Under the old régime teachers were appointed by the general government and were paid for their services by the local government. In this arrangement there was the germ of difficulty, of which the teacher was the unfortunate victim when disagreements arose between the central and the local governments. It is known that salaries were paid very irregularly and oftentimes not at all. This forced the teacher to rely for his subsistence wherever possible upon the pay pupils whom he received in his school and forced him to give his attention primarily to this class, to the disadvantage of those who were unable to make a special payment for their education.

Under the present system the teacher is appointed by the local authorities and paid by the central government. He is no longer the victim of the uncertainty of the local revenues, and receives his remuneration promptly when it becomes due. He is thus removed from the anxieties which formerly pressed him with regard to the daily affairs of life. He knows what his income is and when he will receive his salary, and can regulate his expenditures in such a way that the vicissitudes of his private affairs do not divert his attention from his professional duties. Being secure in the possession of a regular income, he can apply himself with greater peace of mind and with better effect to his daily duties. It is doubtless in large measure due to this fact that so many of the former teachers of the island have successfully confronted the trying ordeal of adapting themselves to the many changes which have been introduced in the school work since the American occupation.

6. It has established an effective system of superintendence. Before the American occupation schools were subject to the supervision of the local authorities, and in addition thereto enjoyed the inspection throughout the island of 2 inspectors. This number has been increased to 19. The districts have been made much smaller, and the superintendent is brought into direct and frequent contact with all of his teachers.

This change has been for the benefit of the schools, of the teachers, and of the educational system generally. From the standpoint of the schools, it keeps an effective supervision and check over the work of the teachers. It permits the early correction of faults in the conduct of a school and it preserves a strict watch over the progress of education in every district. From the standpoint of the teachers, this system makes their work known to the authorities; it gives to the diligent and aspiring teacher an opportunity to make his merits known. It gives to all an aid and counsel in the conduct of their schools and enables them to meet the difficulties of their profession by reference to the advice of the superior officer. The rural teacher especially is isolated. He needs the assistance of the superintendent in his work.

The superintendent in his double relations with the teachers on one hand and with the department on the other is the keystone of the educational arch, the fundamental unit in the administrative system.

In the foregoing are briefly noted a few of the important changes in our educational system which differentiate it from its predecessor. They are the result of an earnest effort for the betterment of educational conditions in the island. They have been introduced not at once, but step by step, and it is only when we review the whole course of the last seven years that we fully appreciate the magnitude of the changes which have been wrought. Many of them, it is true, were effected at the very start of the new government, but it has required some years to put them into effective practice. In this work there has at times been criticism of details, but we believe that there has been a hearty appreciation of the general results obtained. As before suggested, the future may involve no such radical steps as have marked the past, but the success of the educational work in Porto Rico will depend no less than before upon the disposition of all concerned to work together for the common good.

The outlook for the future is bright in the light of the faithful service of teachers, superintendents, and officials who are toiling patiently and uncomplainingly with the meager resources of the present. They have accomplished much, and I can not do more than bear witness to what I saw during nearly three years while it was my privilege to serve with them. I know something

of the self-sacrificing work done in our best schools in the States, and I can say without reserve of any kind that the joint work of Porto Rican and American teachers and superintendents, together with those associated with them, is not excelled anywhere, in my judgment, for devotion to a cause, for unflagging industry, and for adaptation of the means at hand to the end to be attained.

Again I say that when the American people understand the Porto Rican problem the necessary means will be forthcoming from both the public and private purse to maintain an adequate and comprehensive system of public education suited to the special needs of all the people. It is the best paying investment that can be made to help create the institutions upon which self-government depends.

CHAPTER XVI.

EDUCATION IN THE PHILIPPINE ISLANDS.

THE PUBLIC SCHOOLS.

The following information has been taken from the annual report of the general superintendent of education of the Philippine Islands, David P. Barrows, dated September, 1904. The extracts have been selected with a view to showing the growth and tendency of the American influence in education in the islands.

The total of money expended by the insular government for all purposes since 1901 is as follows:

1901	$6,100,453.57
1902	7,657,002.85
1903	10,609,186.13
1904	11,152,139.19

The amounts expended by the insular government for the bureau of education in these four fiscal years have been as follows:

1901	$233,411
1902	1,194,381
1903	1,400,563
1904	1,244,096

It may be seen from this table that the maximum amount of money expended for the bureau of education was in the year 1903. In the past year the work of the bureau has been conducted with the reduced expense of $156.467. In the year 1902 the expense for the bureau of education amounted to 16 per cent of the total expenditures of the government, in 1903 to 13.5 per cent, and in 1904 to 11.2 per cent.

Of the total amount expended for public instruction since July, 1901 ($3,839,040), about two-thirds has been expended for the salaries of American teachers and superintendents. About $890,000 has been spent for schoolbooks and school supplies. In the last year these supplies have included a considerable amount of carpentry tools, iron-working tools, agricultural implements, and wood and iron working machinery for the establishment of agricultural and tool work in the different school divisions.

The appropriations by the insular government for the bureau of education for the fiscal year 1904–5 provide for public instruction in the sum of $1,208,725.

The total amount expended by municipalities for schools in the Christian provinces, and in the case of Albay, Isabela, Samar, and Misamis, including only teachers' salaries, was $508,151.96. Of this amount the city of Manila expended $162,772.72, or 32 per cent of the total.

Out of this amount appropriated for the support of its schools the city of Manila expended $136,976.08, or 84 per cent, for teachers' salaries; $23,057.81, or 14 per cent, for the rental of school buildings, and $2,738.83, or 2 per cent, for all other expenses.

In addition to the school expenditures by the municipalities the provincial boards in 33 provinces have made provision, by appropriation out of provincial funds, for the establishment of provincial high schools. The appropriations

have, in the majority of cases, been very moderate and in most cases limited to the payment of rental for buildings, janitor service, and incidentals. The salaries of all American teachers and all educational equipment for these provincial high schools, which includes not only blackboards, text-books, expendable school supplies, but also tools, and, in a few cases, machinery, have been supplied by the bureau of education.

Education under the American Government commenced with primary instruction. At the present time, after three years of organized effort, the instruction continues to be almost entirely primary. The aim has been and still is to place the elements of an English education within the reach of children of every social class in every municipality and every hamlet of the archipelago.

During the past year a course of study has been prescribed for these primary schools by the general superintendent. It covers but three years of instruction, which include three in the English language, two in arithmetic, prefaced in the first year by easy number work, and one year in elementary geography. In addition to these subjects provision is also made for singing and drawing, for both of which the Filipino has unusual endowment; for handiwork, consisting of school gardening and simple tool work for the boys, sewing and elementary housekeeping for the girls; for physical exercise; and for the training of character. These three years of primary instruction must necessarily appear meager and inadequate to most educators. It should be understood, however, that the primary course of three years does not lead directly to the various secondary courses which are offered at the provincial high schools. An intermediate course of three years is taught in all high schools and at many of the larger municipal schools, the plan being to have the central municipal schools ultimately devote their attention to this intermediate course and to have all primary work done in the barrio schools, which will be located in every one of the hamlets of which a Philippine pueblo or municipality is composed.

The main reason for making the primary course so brief is the need for a plan of study, fairly complete though very simple, which can be taught wholly by Filipino teachers and which, within a reasonable time, can be given to all. In fixing upon so brief and simple a course, consideration was also given to the following circumstances:

The training and attainments of the Filipino teachers are very limited. Few of them have had more than three years of instruction in English, and many of these had no previous education. Some years must pass during which the Filipino teacher will continue to receive constant training and assistance before he will be competent to give more than the three years of teaching which have been prescribed. It is certain that the primary teaching can not be done by American teachers. So far as this branch of instruction is concerned, the American teacher at the present time is wholly occupied with the work of organization and supervision, and the Filipino teachers are doing the actual work of the class rooms.

The total number of children in the Philippines between the ages of 6 and 14 is reckoned at 1,200,000. The primary course aims to give the bare essentials of a primary education, and it aims to give this to every child between the ages of 6 and 14. These age limits, however, allow for a period of nine years in which to give three years of instruction and permit us to divide the total number of children of school age by 3 when we come to fix upon the measure of equipment necessary to meet the ends in view; that is, if there are sufficient schoolhouses, school-teachers, school furniture, and schoolbooks to give continuous instruction to 400,000 children, it will be possible to give every child three years of primary instruction during the nine years between 6 and 14. The attendance of 400,000 children in the primary schools is the standard toward which the bureau of education is aiming, and if it can reach this standard and maintain it for a period of ten years there will be, broadly speaking, no illiterate youth among the Filipino people, but the entire coming generation will be able to speak, read, and write the English language with a fair degree of accuracy and fluency; will be able to make ordinary arithmetical calculations, including those operations which are used in ordinary business; will have a fair knowledge of the geography of the Philippines and of the continents and countries of the world; and, it is believed, will have received a very beneficial influence upon their characters during the formative period.

The past year has shown a notable advance toward the attainment of this [illegible]dard of primary instruction. In the month of September, 1903, a very close [illegible]*imation of the public* school enrollment was made by the division super-

intendents, amounting to 182,202 pupils for the whole archipelago, about 6,000 of these being of intermediate grade. At the close of the school year last March this figure had risen to 227,600. The school returns for the month of July, 1904, showed that there were actually enrolled 263,974. In considering this last enrollment report it should be noted that at the time it was made the schools had just opened after the long vacation; it was during the rainy season and the time of rice planting, in which many children are necessarily employed. Reports subsequent to the 1st of August have not been received in full, but from those provinces from which returns are in there is in every case a still larger gain, and the probability is that when the drier and cooler months of October and November come, and the labor of the children is no longer necessary in cultivation, the total number in primary schools will reach 300,000 of both sexes.

This increase in public school attendance of the past twelve months is due very largely to the spontaneous growth of interest in public instruction among Filipinos of all classes. The American schools passed the experimental stage over a year ago. The American teachers have fully won their place in the confidence and affection of the native population. The period of war with its enmities, suspicions, and social disorganization is past, and the time is ripe for meeting without hindrance the ambitious desires of the entire Filipino race for American education. To meet the increased demand for schools during the past year, a system of school districts has been organized, each in charge of an American supervising teacher. These districts usually embrace a single municipality, but in some cases, owing to the limited number of American teachers, they include two or three. The population of a district varies from 5,000 and 6,000 to as many as 40,000 souls.

These district supervisors spend the greater portion of their time in riding about from barrio to barrio, organizing the small hamlet schools, and, after they are once organized, visiting them regularly and assisting the native teacher in his work of instruction. Wherever possible at least once a day all the Filipino teachers gather at the central schoolhouse for an hour or an hour and a half of instruction under the American teacher.

For the administration of public instruction in the 629 municipalities where schools are organized and in which, as stated above, there are over a quarter of a million children in attendance, the bureau of education has (September 15) a force of 700 American teachers regularly employed and on duty and 49 American teachers who are temporary appointees. There are 47 teachers on leave in the United States whose early return is expected and 40 more under appointment who have not yet reached the Philippines. There are 294 Filipino teachers appointed as a result of civil-service examination and paid by the bureau of education, and, in addition, 3,195 Filipino teachers appointed by division superintendents and paid out of local municipal funds. For the Filipino teachers actually engaged in class-room instruction there is an average of over 70 pupils to the teacher, an unfortunately large number when other conditions are excellent and especially so when the poor housing, inadequate school furniture, and the still limited training of the Filipino teacher are taken into consideration.

The following statement shows the number, sex, and average monthly salary of Filipino teachers for twelve months per year:

Filipino teachers:	
Male	2,080
Female	1,054
Total	3,134
Average salary:	
Male	$10.38
Female	10.50
Average	10.31
Amount expended for salaries:	
Male	255,919.03
Female	132,745.47
Total	388,664.50

[illegible] for [illegible] to be a [illegible] each [illegible] Spanish [illegible] heard or [illegible] and this [illegible] by these [illegible] under the [illegible] Many of [illegible] city in [illegible] The [illegible] during the [illegible]

[illegible] educational [illegible] In the [illegible] radical [illegible] were selected and organized in a [illegible] [illegible] with an English reader and an English primer. Not only was the entire amount of English in the beginning, but their [illegible] of the fundamental topics of arithmetic, geography, and history were also very small. In their own instruction by the American teacher they could not get [illegible] in advance of the pupils in their classes. Frequently the teacher taught one week what he himself had acquired only the week preceding. Such a system of instruction, to be of any value at all, naturally had to be accompanied by the constant assistance, supervision, and instruction of the American teacher. Surprising to say, the Filipino teacher under this method has made progress far in advance of anything that could have been anticipated. Many of those now employed are very fair instructors in the subjects falling within the primary course. They have developed well as disciplinarians. Schoolrooms in charge of Filipino teachers are now almost invariably quiet and well ordered. The daily programme is carried through on time and successfully. What perhaps is more gratifying than anything else is the reliability and fidelity they show to their work and their increasing professional pride.

In addition to the daily instruction given by the resident American teacher, the teachers of each province or school division have been gathered together at least once a year for a period of from four to eight weeks in a normal institute. These institutes, the first of which was held in Manila in April and May, 1901, have been productive of excellent results. Instruction has followed not only the ordinary branches—English, arithmetic, geography, history, civics, and science studies—but a large amount of emphasis has been put upon methods. The simplest matters of class and school organization and conduct had to be explained and illustrated. The method of presenting the subject, teaching with the use of objects, the conduct of English conversation, etc., have been explained with great care and the teachers drilled in these methods. The result has been that the Filipino teachers have left these institutes with new conceptions of school management and of teaching, with great enthusiasm, and with the assured feeling that the government was seeking to raise their efficiency and value. Year by year the results have told in raising the quality of primary instruction.

Primary instruction, with the exception of a very few schools, is now conducted entirely in the English language. More than this, the conversation of the class room is in English. The Filipino teacher has been carefully instructed to address even the smallest pupil in short English sentences, discarding almost entirely the use of the native dialect from the beginning, in order to familiarize the child immediately with spoken English. Under these conditions the Filipino child, who is an exceedingly apt learner and possesses natural ability in the acquisition of languages, is making progress that is almost marvelous.

In the appropriation bill for the fiscal year 1904–5 the number of American teachers is fixed at 863, including a superintendent for the Philippine Normal

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[illegible] Regulations governing the teaching force have been made more definite and satisfactory by reason of having been made a part of the general civil-service rules governing [illegible] employment. This important step became effective by the provisions of act No. [illegible] on September 1, 1903.

School and a superintendent for the Philippine School of Arts and Trades. The compensation provided is shown by the following schedule, which can not be exceeded:

Superintendent normal school	$3,000
Superintendent school of arts and trades	2,400
3 teachers, at $2,000	6,000
8 teachers, at $1,800	14,400
10 teachers, at $1,600	16,000
50 teachers, at $1,500	75,000
80 teachers, at $1,400	112,000
60 teachers, at $1,300	78,000
350 teachers, at $1,200	420,000
50 teachers, at $1,100	55,000
137 teachers, at $1,000	137,000
113 teachers, at $900	101,700
Total (863)	1,020,500

UNIFORM COURSES OF STUDY.

In accordance with his legally prescribed duties, the general superintendent, on the 15th of June, 1904, issued prescribed uniform courses of instruction. Prior to the issuance of the bulletin upon this subject (Bulletin No. 7, bureau of education) considerable diversity existed in all school work. These prescribed courses are for primary, intermediate, and secondary schools.

As stated above, the primary course is taught almost entirely by Filipino teachers under American supervision. It is planned to have this primary course taught in full in all barrio schools, the pupil to proceed therefrom to the central municipal school for instruction in the intermediate course, and thence to the provincial high school for one of the secondary courses, which aims to supply him with a profession or calling. At present, however, in the majority of barrio schools it is not possible to give more than two years of primary instruction, while the central municipal school doing intermediate work is the exception rather than the rule. The provincial high schools are giving their attention in the current year almost exclusively to intermediate work. This condition is indicative of the careful effort that is being made to grade pupils no higher than is warranted by their facility in reading and writing English.

Emphasis upon "science studies."—Larger place is given to science work than is usual in the public schools of America. Training in the English language and literature supplies the place in the Philippine system of the classical studies of American school programmes. Time is gained thereby for that training in exact methods and concrete subject-matter for which there is peculiar need.

Another difference between American and Philippine educational conditions may be noted in this connection. An important function of American educational institutions had lain in the direction of modifying the strongly materialistic tendencies of American life. No stimulus has been needed to supplement the national tendency toward the acquirement of material benefits. Such tendency has ever been an integral part of the environmental conditions and racial temperament. It has led to the highest material advancement, while the academic spirit has been as a guard against the stifling of the nonmaterial.

Here in the Philippines the demand upon the academic spirit is reversed. The great need of Filipino national life is precisely in the direction of effort to acquire material benefits. The graces of the culture studies may well await later lessons. The crying need now is for a stimulus which environment and racial history have for centuries denied, a stimulus to "practical" activity. It is with that training which gives the most tangible benefits that our secondary and specialized education purposes to concern itself. Elementary training of such character is given under the "science studies," while the bulk of the work in the secondary courses is to the end of efficient and scientific conduction of various industrial activities.

We look to the Japanese for illustration of very much that is helpful in solving Philippine problems. There the most notable educational achieve-

ment of modern times has been effected. They have shown no conservatism in the work of national regeneration. Nowhere is this more apparent than in their educational system. In it we find a remarkably large place given to those subjects of which old Japan was ignorant and in need, and which in an educational scheme may be grouped as "science studies." Under this caption the Philippine courses of instruction prescribe a large amount of work which finds its subject-matter in those things which most closely touch the daily life of the Filipino and affect his economic status.

Education in the Philippines is concerned with a people whose lack of exactness, especially in their mental processes, is a conspicuous racial fault. The Filipino has an instinctive and intense reluctance to admit ignorance. This characteristic has often earned him an otherwise undeserved reputation for unreliability or dishonesty. He fails to appreciate the desirability of accuracy. Training in science, properly given, will develop a new respect for exactness and a conception of the inexpediency of misstatement, proving perhaps a better corrective than methods which meet this fault by more direct attack.

The plant and animal studies place emphasis upon economic values. They give to all students information fundamentally related to the improvement and expansion of agriculture in the islands—information which is more expanded and accompanied by practical field work in the secondary course in agriculture. Their pedagogical purpose, on the other hand, is to induce accurate first-hand observation and reasoning about facts observed. Especial difficulty lies in overcoming the tendency of the Filipino pupil to learn merely by rote. The science studies largely eliminate the use of this method in that they require answers as the fruit of reasoning rather than of memory. Filipino boys and girls are quite alike in their enthusiasm for work which is out of doors, away from the printed page, and concerns things which they can handle, which they have seen every day, and which have very considerable economic importance for them.

SECONDARY SCHOOLS.

After what has been previously stated it will be understood that secondary instruction is only beginning with the current school year. Schools for more advanced instruction than that provided by the primary course were intended also to provide for students whose greater age makes them reluctant to attend the barrio schools. Legal provision was made for these institutions in act No. 372, quoted above. Such schools have been organized in 35 provinces, with attendance varying from 75 to 500. By an understanding which has already been suggested, the provincial boards are expected to provide by rental or construction for housing of these schools, while the bureau of education supplies teachers and educational equipment. This arrangement has led to the designation of these schools for higher instruction as "provincial schools"—i. e., schools supported, at least in part, by the provincial governments. This somewhat ambiguous expression has been recently modified upon the forms of the bureau into "provincial high schools."

The course in literature, history, and the sciences in these schools will compare with the American high school course, although the requisites for admission are less difficult and several courses taught in American high schools here receive less consideration. This will be most noticeable in two lines. The first is the classical languages. The slight attention paid to Latin and the elimination of Greek are made necessary by the importance of other subjects which must, in view of immediate needs, be emphasized. While in the United States we depend, in our training of the youth, upon Latin and Greek for giving breadth of mind and depth of intellectual and moral insight, here in the Philippines we must depend upon English literature for these same purposes. It is believed that English is adequate to impart these essentials of education, both in disciplinary and spiritual aspects. The other notable difference is in the teaching of higher mathematics. There can be found place in such a course as this for hardly more than the briefest elements of algebra and geometry. Advanced work in these branches, in trigonometry, and the higher mathematics must necessarily be left to be pursued in special courses leading up to professional training. The course has been drawn to emphasize the subjects of education which have heretofore been much neglected in the Philippines, and these appear to be literature, history, and the modern sciences.

This course will doubtless receive modification as it is put to the test of *actual trial.*

SCHOOL BUILDINGS.

School buildings which were erected by the Spanish Government are still standing, and to some degree serviceable, in at least 374 municipalities. Their total number summarized from recent reports is 534. These buildings, though usually substantially built of stone or brick, are as a rule poorly lighted and seldom of a type that conforms to good schoolhouse designs. During the military occupation many of these buildings were occupied as army storehouses or offices. In some cases they were destroyed in the course of war. Others have been rendered unfit for use by decay. In most cases, however, where the expense was justified, these buildings have now been reconstructed or repaired.

Building has been exceedingly expensive in the islands ever since the American occupation, and, while less so now than at any time during the past five years, is still costly. Furthermore, school buildings were never erected by the Spaniards in the numerous hamlets of which each municipality is composed. The public school building was always located on the plaza, and was never built large enough to house more than a fraction of the children of the pueblo who are now presenting themselves for instruction.

Thus the narrow sites or poor construction of the Spanish schoolhouses, their inadequate size even where they still stand, the absence of buildings in the barrios, and the fact that no buildings whatever for secondary instruction were erected by the Spanish Government have compelled the bureau of education to begin practically at the bottom and plan an entirely new system of public school buildings for the islands. The plan adopted contemplates three kinds of school buildings—the barrio school, the municipal school, and the group of high school buildings.

Turning next to municipal school buildings, reports have been secured from all but two divisions with nearly complete data. As stated above, the 534 or more buildings left by the Spanish Government have, almost without exception, been put into a fair condition of repair. Roofs, which generally were destroyed during the progress of war, have been replaced, new floors laid, and in many cases new windows and doors opened, allowing larger admission of light and air.

Under American rule up to December, 1903, there had been constructed 369 new school buildings. The greater part of these were built in the year 1903. These figures do not distinguish between schoolhouses built of stone or hard woods, and of consequent durability, and those built of light materials with grass or nipa thatched roofs; but about 40 are of the former class.

A comparatively large amount of school building has been accomplished within the seven months of the present calendar year. Most of these are barrio schoolhouses, built of hard-wood frames, nipa or grass roofs, bamboo walls, and usually bamboo floors, although in some cases these are of hard wood.

Summarizing, we have the following total of municipal and barrio school buildings:

Serviceable schoolhouses of Spanish construction	534
Built under American rule in the period ending December, 1903	369
Already built or under contract for erection in the calendar year 1904	600
Total	1,503

Those left from the Spanish period which were of light materials and are no longer truly serviceable are not here included. Of these 395 are practically completed.

This leaves approximately 712 schools for which there are no public schoolhouses. According to reports, 333 of these were housed last year in buildings rented by municipalities.

The remaining schools, to the number of 380, are housed in private residences loaned to the municipality without rental; a considerable number in convents or parish houses where these buildings are in the hands of the municipality and have been offered by the municipality for occupancy by school, and a still larger number are held in the town halls or presidencias. A few small schools are held in the houses of the teachers.

THE TECHNICAL SCHOOLS AT MANILA.

Schools maintained by the Philippines for the direct preparation for a profession or trade are three: The Philippine Normal School, established in 1901; the Philippine School of Arts and Trades, established in 1901, and the Philip-

pine Nautical School, established in 1839 by the Board of Commerce of Manila and reopened soon after American occupation.

The Philippine Normal School.—During the past year this institution has made gratifying progress. The attendance has increased by one-third and the requirements for entrance have been raised very materially. A corresponding improvement in the quality of students entering has been noted. The work of the high schools throughout the provinces has shown itself not only in the better preparation of those entering the lower classes, but has also given a considerable number of desirable students for the more advanced classes. All of the 15 members of last year's graduating class are now teaching in the public schools.

A departure was made this year in the admission of advanced students who do not expect to become teachers. Courses in advance of those offered in the provincial high schools have been announced. These are adapted to prepare students for entering American colleges or the future University of the Philippines.

The following statistics are taken from the normal school report for the month of July, 1904:

	Boys.	Girls.	Total.
Enrollment	360	167	527
Average attendance	304	147	451

The Philippine School of Arts and Trades.—In the past year there has been great increase in interest in the work of this school. This is especially gratifying, inasmuch as a year ago there was some difficulty in securing the attendance of desirable students sufficient to fully use the accommodations provided. In the current year it has been necessary to decline fully 75 applicants. The present equipment of the school is adequate for about 150 pupils. By conducting both day classes and night classes, 270 pupils in all are now receiving instruction. The following table indicates the increase in the present year in the day classes:

Study.	September, 1903.	September, 1904.	Increase or decrease.
English branches	110	150	+40
Drawing	67	120	+53
Metal work	11	44	+33
Woodwork	51	70	+19
Telegraphy	37	30	− 7

The school has furnished 40 telegraph operators to the Philippine constabulary. These young men have done their work satisfactorily, and many have been promoted. The drawing department has furnished 6 men for work, 4 being teachers and 2 draftsmen. This department has also assisted the office of the general superintendent by making charts and drawings for bulletins of the bureau and various drawings for school buildings.

The Philippine Nautical School.—The oldest educational institution in the islands under the supervision of the bureau of education is the Philippine Nautical School, which was established by the board of commerce of Manila in the year 1839. The school was begun in a building on Calle Cabildo, Intramuros, the exact location of which is not certainly known, and was conducted in this place until the year 1863, when the building was totally destroyed by an earthquake. The friends of the institution, unwilling that it should cease to exist, secured a site on Calle San Juan de Letran. About 1884 the school was removed to Calle Palacio and in 1898 to its present site on Calle Santa Elena, in the district of Binondo.

The study of mathematics has always been made the strongest feature of the course, and from time to time a considerable sum of money, amounting in all to something over $10,000, was provided by the board of commerce and expended for equipment by the educational officials of the Spanish Government,

some of the apparatus being yet in the possession of the school and in use in its work.

Several additions to the school equipment have recently been made, including a valuable chronometer and four 10-oar 28-foot boats.

Before the end of the Spanish rule the school had been placed under the direction of the civil government of the islands.

MUSIC, DRAWING, AND KINDERGARTEN.

Work in these lines has been conducted in the city schools of Manila during the past year. Owing to the necessity for special teachers for these lines of work this instruction while in the experimental stage has been limited with a few exceptions to the city of Manila.

SCHOOLS FOR PAGAN TRIBES.

In the preceding portion of the report figures relating to population, taxation, school attendance, etc., have embraced only the Christian population of the islands. Very little teaching has yet been done among the pagan tribes. These peoples are found in considerable numbers, yet it will be some time before anything more than tentative experiments for their education can be undertaken. There are a few wild inhabitants in Panay and Negros (the Bukitnon) and a similar but more numerous element in Misamis and Surigao. Eventually, of course, these people should have instruction at public expense and be assisted toward civilization. No schools have been started for the Mangyan of Mindoro, but even the Christian towns of this island have received so little in the way of public instruction in the past that the work of the bureau in this province will probably be entirely devoted to them for some time to come. On the islands of Busuanga and Paragua there is a small, scattered pagan element and in the south of Paragua a Mohammedan Malay element. No schools have as yet been established for these people. The only practical plan in view is to secure a few bright representatives of each settlement or band and educate them at some provincial school to become instructors and leaders of their own people. In the Province of Zambales one school has been established in the barrio of Botolan for Negrito children—the only effort being made at present to educate these little blacks. The experiment has not yet proceeded far enough to indicate anything. In northern Luzon, however, in the Cordillera Central, the pagan element is numerous and relatively very important. Here is the great stock of primitive Malayan tribes known as the Igorrote. These people number something over 200,000, being most numerous in the old Spanish politico-commandancias of Bontoc, Quiangan, Lepanto, and Benguet, and in the Province of Abra. Schools were established among the Igorrote of Benguet three years ago, but there have been few results proportionate to the effort made. It is desirable, however, that a few young men in each of the strong and powerful towns which cover the steep mountain sides of the Cordillera should receive the rudiments of an English education and thereby be able to serve as interpreters and local officials among their own people. The Spanish system was to place an Ilocano with the title of "directorcillo" in each of these towns as soon as they were conquered or subdued. These officers, as representing Spanish authority, practically governed the towns. Their presence was and is distasteful to the Igorrote, who are beginning to appreciate the advantages that would accrue to them through having members of their own tribe competent to represent the government. With this object in view, training schools have been established for Igorrote boys at Baguio, Benguet; Cervantes, Lepanto-Bontoc; in Quiangan at the site of the old Spanish cuartel and mission station, and at Alilem, Amburayan. These schools have not yet progressed very far. The one at Baguio is the oldest and most fully organized. Appropriation was made by the insular government for school buildings and a central recitation building with several other buildings for the accommodation of the boys have been built. These buildings are, however, of poor type. Something over 100 boys were in attendance at this school last year. At Bontoc a school building has been erected and is now complete, costing $280 to the government. Some 60 boys have received profitable instruction at this school in the past year. At Cervantes a site has been chosen and an appropriation of $2,000 made by the government. At Quiangan, which is the very heart of the head-hunting region, occupied by a fierce but industrious people numbering altogether about 40,000, very interesting work has been begun under a teacher of large experience in

Indian schools in the United States. School gardening and elementary tool work have been started here. An appropriation is needed for the construction of buildings.

A provisional course of study covering about four years has been outlined for these Igorrote schools. It provides for instruction in the English language to a point where a child can speak, read, and write it readily, for elementary arithmetic, for enough geography to give the child an idea of the world existing outside of his own wild mountains, and some study of the plant and animal life of his own mountain region. Industrial work is planned to cover agriculture, elementary carpentry work, and elementary ironwork. In a few Igorrote towns skillful ironwork is done by the people. This industry being altogether localized, the hammers and anvils are of stone and the bellows are of the rude cylindrical style common throughout Malaysia. Yet with these tools the Igorrote produces very carefully made bolos, axes, and spears. He is naturally interested in improving his ironwork and the tools with which he conducts it, and there promises to be no difficulty in securing a large attendance of boys for this kind of instruction. In ironwork, as well as in carpentry, the instruction will be simple in character and limited to teaching dexterity in the use of a few useful American tools. On the other hand, the teaching of agriculture must be advanced and scientific in character. The Igorrote is already the best and practically the only scientific agriculturist in the Philippines. At enormous labor, extending over many generations, these mountain people have built up astounding terraces covering the mountain mile after mile. These terraces are usually under irrigation. They are carefully fertilized and tended. The crops are camotes, rice, tobacco, taro, several vegetables, and cotton. His agriculture can, however, be benefited by the introduction of improved seeds, by the destruction of noxious insects, and by making more general the cultivation of certain products which are now localized.

For the girls, industrial work will center around the teaching of spinning and weaving. As stated above, cotton is raised, but only in a few localities.

SCHOOLS IN THE MORO PROVINCE.

Since the organization of the Moro Province under special form of government in September, 1903, the schools of southern Mindanao and the Sulu Archipelago have been administered separately from this bureau. The school superintendent for this region is one of the five members of the provincial council.

The school problem presented here is an exceedingly difficult one. The population is of three kinds: A small Christian population which followed the Spanish soldiers and missionaries into southern Mindanao and formed settlements in the vicinity of the Spanish forts; the Mohammedan population, which comprises the large majority of the inhabitants, and the pagan tribes living in the hilly interior of the mainland of Mindanao. By none of these three classes are public schools thoroughly welcomed. The Christian population is devotedly attached to their own parochial schools, which are supervised by Jesuit missionaries who have returned to their parishes. The Moros retain all the conservatism of the Mohammedan devotee everywhere, and have been unable to decide whether the American is to be accepted or resisted. The pagan tribes are in a state of barbarism in which it is impossible for them to understand the reason or advantages of schools.

In spite of these difficulties, public education, especially in the last year, has made encouraging progress in this part of the archipelago. The organization of the government of the Moro Province led to a marked change in the management of the public schools. Their administration was centralized, and sufficient funds secured for their support. By act No. 1 of the Moro legislative council, all schools of the Moro region were made provincial institutions. During the past year 52 such schools were in operation, 10 of which had been newly established. The majority of these are among the Christian tribes and attended for the most part only by Christians, but there are 7 which are attended by Moros and 2 by pagan Bagobos in the Gulf of Davao. There are on duty in this province 15 American teachers and 54 native teachers, 9 of whom are Mohammedans. These are all paid from provincial funds. The total enrollment of these 52 schools was 2,114, of whom the boys numbered 1,289 and the girls 825. About 240 of these pupils were Moros, 110 Bagobos, and *the balance of Christian parentage.*

A four years' course of primary instruction has been put into effect by the school superintendent of the province. It covers much the same ground as the primary course prescribed by this office for the archipelago. The study of English has had foremost attention, but the Moro Province, unlike other parts of the archipelago, requires some attention paid to the native languages. The Christian population of southern Mindanao, and especially that of Zamboanga, speak a corrupt Spanish, the native dialects having disappeared. The Moros speak a number of different dialects, nearly all of which have been reduced to writing by means of Arabic characters. The number of Moros who can read and write in the native characters is estimated by the superintendent of schools as 8 per cent, 4 per cent among the Sulus, less than 2 per cent among the Samals.

The Moro Province appropriated $42,615.48 for educational purposes for the nine months ending July, 1904, and the expenditures were $23,449.08, leaving an unexpended balance of $19,166.34.

Summary of statistics.

Day schools:	
Primary	2,233
Intermediate	12
Provincial	38
Technical	3
Total	2,286
Night schools	460
Total schools	2,746
Teachers:	
American	787
Native—	
Insular	288
Municipal	3,126
Total	4,201
Population	7,165,110
School population	1,408,691
Enrollment	279,414
Attendance	194,154
Schoolhouses	1,484

Statement showing the proportion of children at present reached by school work to the total population of children of school age.

Population	7,163,510
School population, ages 6 to 16, inclusive	1,428,691
Children who should be in school [a]	468,487
Enrollment August 1	280,414
Attendance August 1	194,154
Children for whom additional primary instruction must be organized	199,076
Percentage of children in school	19
Percentage of children to be yet reached	14

CENSUS STATISTICS OF PUBLIC AND PRIVATE SCHOOLS.

The preceding account apparently takes cognizance only of the public schools under the American bureau of education, and therefore affords no information as to the other educational facilities in the islands. The census of the Philippine Islands, taken in 1903, however, gives statistics of private and religious

[a] The basis of this estimate, as indicated in the body of the report, is one-third of the total number of children between the ages of 6 and 14.

schools which supplement those contained in the foregoing report of the superintendent of education. There is a discrepancy between the statistics taken from the two sources indicated, which may partly be explained by the statement on page 671 of the Census Report, Volume III, that it was found difficult to separate with certainty the public schools from the private and religious schools in the census schedules. There were undoubtedly schools which were essentially public, being free and supported by the funds of the local government or private contributions, but which were not under the control of the bureau of education. Most of these, if not all, were called public schools in the schedules, and have been so tabulated. Their inclusion is probably the reason for the magnitude of the figures relating to public schools compared with those of the bureau of education.

With this explanation, which does not, however, account for a number of particular discrepancies, we reprint some of the census statistics relating to the primary and secondary schools. No report of the condition of the university has been received since the publication of the report of this bureau for 1897–98.

Primary schools:	
Public	1,593
Private	951
Religious	314
Total	2,858
Secondary schools:	
Public	40
Private	52
Religious	10
Total	102
Superior schools	2

This makes the total number of schools in the islands (including those of university grade) 2,962. It is remarkable that only 1,593 public schools are given by the census, if the 2,286 primary day schools reported by the superintendent of education are public schools. The census figures show that only 55.8 per cent of the primary schools were public schools, the private (951) and religious (314) schools amounting to 44.2 per cent. In secondary education the private (52) and religious (10) schools took the lead over the public (40) schools. According to the report of the superintendent of education quoted above, the secondary schools under the bureau are in process of organization.

The census adds on this point: In 38 out of the 50 political subdivisions above given public schools outnumbered the private and religious schools taken together. In certain provinces nearly all the schools were public. In 11 other provinces mentioned, including the rich provinces of Albay and Manila, the private and religious schools outnumbered the public schools. Of the 52 private secondary schools 18 were in Albay, 10 in Manila, and 7 in one other province. The large number of private and parochial schools is partly due to a reactionary feeling in regard to the secular character of the public schools, in which no religious instruction is allowed during the school session. This prejudice is, however, dying out since the school law allows religious instruction for one and one-half hours three times a week in the school building.

The following table is interesting as showing the periods of construction of the school buildings of the islands:

Dates of erection of school buildings.

1900–1903	2,075	1830–1840	12
1890–1900	289	1820–1830	9
1880–1890	150	1810–1820	5
1870–1880	84	1800–1810	5
1860–1870	65	1700–1800	9
1850–1860	23	1600–1700	5
1840–1850	5	Unknown	226

The census gives a larger number of public school buildings than the bureau of education, besides the private schools, as is shown in the following summary:

Public schoolhouses:		Private schoolhouses:	
Nipa	1,085	Nipa	1,217
Durable	885	Durable	274
Total	1,970	Total	1,491
Owned	1,652	Owned	1,396
Rented	318	Rented	95
Total	1,970	Total	1,491

The census gives an aggregate of 5,925 teachers, of whom 3,667 were in the public, 1,657 in the private, and 601 in the religious schools. The bureau of education gives 4,195 public school teachers. There were 434 teachers in the secondary schools, of whom 161 were in the public, 191 in the private, and 82 in the religious schools. There were 65 professors in the two superior institutions (University of Santa Tomas at Manila, and the Institute Aclan, a private university in Calibo, province of Capiz). Of the 5,925 teachers, 4,898 were Filipinos (3,120 men and 1,778 women) and 785 were Americans (551 men and 234 women); 236 were Spanish (133 men and 103 women), besides 5 Chinese (4 men, 1 woman), and 1 Englishman.

It further appears that of the 3,667 public school teachers in 1903, 2,880 of the Filipinos were Catholics and 13 Protestants, 60 of the Americans were Catholics and 708 Protestant; there were 6 of other faiths. Of the 2,258 private or religious school teachers, 2,003 Filipinos were Catholics and 2 Protestants; 7 Americans were Catholics and 10 Protestants, and the 236 Spaniards were all Catholics.

The census (1903) gives the enrollment at 336,385, of whom 266,362 were in the public schools, 63,545 in the private, and 26,478 in the religious schools. Of this number, 341,938 were enrolled in the primary grade, 261,615 being in the public primary, 56,405 in the private primary, and 23,918 in the religious (parochial) schools. The secondary grade included a total of 14,011, of whom 4,747 were in the public, 7,022 in the private, and 2,242 in the religious schools. There were also 436 university students. (The census school age was 5 to 17, and there were 2,137,397 children of this age.)

The enrollment in the public schools was 74.8 per cent of the total, and 96 per cent of the enrollment was in the primary grade. Nine and one-half per cent of the people outside of Manila could use English.

FILIPINO STUDENTS IN THE UNITED STATES.

[Extracts from the report of the superintendent of Filipino students in the United States.]

The plan to send students from the Philippines for education, even complete Americanization, to the United States, has been the purpose of the educational authorities since soon after the implantation of civil government in the archipelago by the Americans. It took definite form with the passage of act No. 854 by the Philippine Commission on August 26, 1903.

A resolution of the Commission fixed the number for the first year at 100 students, 75 of whom were to be appointed from throughout the archipelago.

The apportionment was based roughly upon the school population and the importance in industrial lines of the respective provinces.

For the purpose of selecting the students in the various provinces the provincial governor and the division superintendent of schools were instructed to propose candidates for appointment, under the conditions mentioned in the telegram hereinafter quoted. With very few exceptions the provincial governors are Filipinos, the exceptions being Americans. The division superintendents of schools are all Americans. These two officials of course possessed a complete knowledge of local conditions, the governor being acquainted with the character and social standing of the individual applicants, while the division superintendent, personally and through his teachers, had a complete knowledge of the educational qualifications of the students. The concurrence of both of these officials was necessary, and they were guided wholly by the terms of the following telegram, which was sent to each of the provincial governors:

> After conference with the division superintendent of schools, select for appointment as students in the United States at the expense of the government, —— Filipino students of the public schools between 16 and 21 years of age. Each candidate is subject to examination in Manila, and in case of rejection his expenses to Manila and return home will be paid by the government. Each student must be of unquestionable moral and physical qualifications, weight being given to social status. He must be well advanced in English, mathematics, history, geography, and of exceptional general intelligence. We must have the best boys in your province. Appointees must sign agreement to conform to reasonable regulations and to enter the Philippine civil service upon return to islands for a period equal to that spent in the United States at government expense. Every qualification mentioned is imperative. Expenses of appointees will be paid by the government after embarkation at Manila for the United States. Telegraph selections immediately in the name of yourself and division superintendents, and hold candidates in readiness to proceed at once, upon telegraphic orders, to Manila and the United States. Certify immediately this telegram to division superintendent of schools. Prompt action is desired.
>
> TAFT, *Civil Governor.*

Practically all of these provinces held competitive examinations, and those students securing the highest averages, who presented the other qualifications necessary, were certified to the civil governor by the officials named. Upon these certifications the appointments of the 75 students were made, and they were directed to proceed to Manila in season to embark.

The other 25 of the first hundred were chosen from a large number of applicants, and were proposed after examination by a committee composed of Dr. T. H. Pardo de Tavera, Philippine Commissioner; Hon. A. W. Fergusson, executive secretary, and the superintendent of the Filipino students. This selection was made without reference to attendance upon public schools, as was necessary in the case of the 75. Natural ability, together with special mental and physical fitness and promise, moral character, and general availability determined the selection.

The students were distributed from Los Angeles on the 12th and 13th of November and were located as follows: At Santa Barbara, 7 students; at Ventura, 6; at Hueneme, 4; at Santa Paula, 4; at Claremont, in the public schools, 4, and in the Pomona College, 8; at San Diego, in the high school, 5, and in the State Normal School, 9; in National City, 5; at Compton, 4; at Whittier, 6; at Redlands, 6; at Riverside, 16. Two students already in the United States at the time of their appointment were located, 1 at Berkeley, Cal., and 1 at Ann Arbor, Mich.

Several reasons induced me to bring them to southern California at that *time, the climate of course* furnishing the most potent. The schools of Cali-

fornia are of a superior grade, and they were freely offered for our purposes. Half tuition was granted at Pomona College, no tuition being paid elsewhere. A warm and hospitable reception was awaiting the students in the homes of the people of the communities where they were placed, and they will be in every respect better fitted for a change to a different climate and entrance into new schools next fall.

In accordance with my recommendation, made and repeated in former reports, the Commission has seen fit generously to provide in act 1133, amendatory to act 854, that the necessary expenses of medical attendance upon the Filipino students shall be paid in addition to, and not deducted from, the regular annual allowance of $500 for each student.

During the period covered by this report (from October 10, 1903, to June 30, 1904) the students have expended for education and maintenance an average sum, approximately, of $295 each.

In every town students have been given private instruction. In some cases this special tuition has been paid for, but in the majority of cases it has been furnished by the regular teachers outside of school hours, and solely on account of the personal interest felt by the teachers in the students. Not one of the hundred students comprising the first expedition to the United States failed of promotion at the close of the first year, and many were promoted during the year as well. They have kept pace nearly always on equal terms with, and often a little ahead of, their American schoolmates, and not only in studiousness and seriousness are they often cited to their American companions as desirable examples, but many teachers have stated to me that they have been a very noticeable influence for gentleness, courtesy, and neatness upon their American fellow-students. Not the least of the many beneficial results of this Filipino student movement has been this effect upon the American students and others with whom they have associated. It has amounted in many cases to a conversion from prejudice and antagonism to real friendship for and interest in the Filipino people and their government. They have been received into the best families and into the best social circles in practically all of the towns in which they have been located. Indeed, it has been necessary in several cases for me to request the students to abstain from accepting invitations to social functions except on Friday evenings and Saturdays. Of course there is danger in too much social attention, but in reason their social life is quite as important as any other. It is interesting to note that at a number of places the students have taken part, always in English, in public entertainments connected for the most part with their schools.

The schools of southern California have in many ways proven of exceptional adaptability to the Filipino student's needs. Many of the schools, especially high schools, in southern California have new buildings and the latest equipment in all departments, while the teaching force of all the schools, whether in small or large towns, is of a standard scarcely excelled in any other State. There are many Spanish-speaking people, Mexicans, in this region, remnants of Mexican domination, or immigrants from our neighboring Republic. Many of these have attended the same schools with the Filipinos, and the Filipino is in many respects more like the Mexican than he is like any other race I know of. The sectional or race issues are unknown, and the typical western hospitality has been extended to the visitors.

The selection of permanent schools—that is, schools for the students to attend during the remainder of their stay in America—has been a matter of serious study and careful investigation. The States in which most of the students will be placed are those of Massachusetts, Connecticut, New York, Pennsylvania, Ohio, Illinois, Indiana, Michigan; a few in Maryland, West Virginia, Tennessee, and Missouri.

The superintendent, Mr. William Alexander Sullivan, visited the States above mentioned and arranged for the admission of the Filipino students at the following institutions: The Pennsylvania School of Industrial Art, at Philadelphia; the State Normal School, West Chester, Pa.; the State Normal and Training School, at Trenton, N. J.; the high school, Meriden, Conn.; the Massachusetts Institute of Technology, Boston, Mass.; the State Normal School, Oswego, N. Y.; Cornell University, Ithaca, N. Y., and the Ithaca High School. A number of students will be sent to the Carnegie School of Technology, at Pittsburg, when that institution is completed. The next schools selected were the high

school at Cumberland, Md.; the high school at Parkersburg, W. Va.; the Kentucky University, Lexington, Ky.; the high school at Chattanooga, Tenn., and the University of Tennessee, at Knoxville. The preparatory technical school of the University of Cincinnati was next selected; then Oberlin College, Oberlin, Ohio; then Michigan University, Ann Arbor (engineering). The State Normal School, De Kalb, Ill.; the State Normal University, Bloomington, Ill.; the University of Indiana (law), and the University of Missouri (medicine), at Columbia, Mo., complete the list.

A TEACHER'S NOTES ON THE SCHOOLS OF THE PHILIPPINE ISLANDS.

By Robert B. Vaile.

The school system of the Philippine Islands, which is providing elementary and secondary education to more than 400,000 pupils who are scattered over a territory about equal in area to that of Ohio, Indiana, and Illinois, is the product of a process of development from virtually nothing, save the relics of a former system in the form of a certain amount of crude equipment and an approach to a school-going habit among the children.

It was in the fall of 1901 that about 600 teachers, of which number 200 were women, were assigned to the United States army transport *Thomas* for transportation to Manila. They had received their appointments upon the recommendation of a university or of a State superintendent, and a college or normal school training was presupposed. Three or four of the men in the company had been in the islands before as soldiers, but all of the rest had only second-hand information about the islands, and not very much of that.

Upon arriving in Manila they were provided with quarters by the school authorities, who were aided materially by the military authorities. They were sent out in parties to their respective stations within the course of a month, and then it was that the real work began. My own experience was nearly typical of the situation generally.

It was my fortune to be assigned to Abra Province. There were 6 teachers sent to that Province, and to get to it we traveled on a Spanish coasting vessel for two days to Vigan, a point on the west coast of Luzon about 300 miles north of Manila, and then on a bamboo raft, through the courtesy of the military authorities, up the Abra River about 18 miles to Banguid, the provincial town of Abra Province. We arrived in Banguid on a Saturday night, and on Sunday I proceeded the additional 7 miles I had to go on another raft.

I was told by the commanding officer of the troops in the province that the company of soldiers which had been occupying the town to which I was going for the past few months was just moving away. So it was that I took up my residence in a town in which I was quite unable to talk with a single individual save by means of a dictionary. I took up my school work the next morning. The schoolhouse I found to be a substantial one-storied building with a thatched roof, stone walls, a good board floor, and 15 or 20 hard-wood benches, each made for 5 pupils. The building was divided into two equal rooms by a stone partition; the boys had one of these rooms and the girls the other. There was only one blackboard, about 3 feet square, a box of chalk, and a quantity of ruled paper for writing exercises, besides a reading chart, in the schoolhouse by way of equipment. I found that some of the children had American slates, and also some had primers, which I learned had been distributed by the military authorities. There was a Filipino man teacher in the boys' school and a woman teacher in the girls' school who had attendance records, kept in Spanish, running back for some years.

Thus it appears that under the Spanish régime real attention had been given to school affairs, and even during the interval preceding the American occupation the schools had not been allowed to go out of existence. The friar in each town had had control of the school, as was shown by his signature on the retained copies of the old reports that I saw. Apparently not a great deal had been attempted in the way of instruction, since the only text-books that I saw were primers, catechisms, and elementary arithmetics. The Spanish friars used to have private classes in Spanish, and in the larger towns there were academies which offered instruction in Spanish only. In Manila there are still two large schools—one under the charge of the Jesuits, besides a school of medicine and one of law.

The first morning upon which I confronted the 70 or 80 little boys, each of whom had on a long shirt, while some had no more, found me with hardly a single point of contact with my pupils. They knew not a word of English and I knew hardly a word of either their dialect or of Spanish. As for the value of Spanish, the children virtually knew nothing of it, the teacher could use it only indifferently, and I found that there were only about a dozen men in the whole village, of about 4,000 inhabitants, who could carry on a conversation in it, and even they did not use the subjunctive mood with any degree of facility or accuracy.

From a drill on vowel sounds, accomplished by means of much sign language, the children proceeded to our consonant sounds, some of which proved to be extremely difficult for their tropical vocal organs. Then, by means of object and motion lessons, of endless repetition, of crude translation, and explanation, with the help of the Filipino teacher, through Spanish into Ilocano, the local dialect of that region, they read in the primer with a fair degree of understanding. Of course, the older ones—some of them were 16 years old—made the best progress, and at the end of the first school year they were finishing a first reader.

Writing exercises were the easiest for them all, and a number acquired considerable ability in drawing. Their sense of number was not very acute, save in exceptional instances, and, of course, geography and history were so abstract to them as to be difficult. Only four or five in the whole school had ever been outside of the province, which is no larger than most Illinois counties.

They learn very readily to sing, taking up with avidity anything that was set before them, especially our southern dialect songs, and also our usual school songs. Committing to memory selections to be spoken at school or at an exhibition is a particular delight to them, and they have an aptitude for contests of that sort, with money prizes. They like drills also, and tableaux, and even plays. Holidays are naturally most pleasing to them, and to judge from the old school records they came frequently. The people kept all of the church days, of course, and all of the Spanish days. The harvest seasons—the rice-planting and rice-cutting seasons—interfered with continuous school work.

The inhabitants of Abra Province, together with those of the adjoining provinces of Ilocos Norte and Ilocos Sur, are known as Ilocanos. That means to-day simply that they use the dialect called Ilocano, for while it is true they have facial characteristics and social customs which might tend to differentiate them from the Tagalos and Visayans, still those differences have so far disappeared that they would seem to be almost negligible for ordinary purposes. The existence of the barrier, however, of language, as well as that of the mountain chain or ridge or the sea, which almost invariably separates those speaking one dialect from those using another, has even to this day effectually tended to keep apart the ten or twelve larger divisions of the people, or the thirty or more *subdivisions, if the lesser dialects be considered.* Thus it is that there is

no feeling of nationality as yet among the Filipinos, and thus it is that none seems possible until a common language comes into existence and the means of communication become more extensive than they now are.

In my school there were but two representatives of the non-Christian (or hill) tribe that occupied the territory immediately to the east of the town in which I lived. This particular tribe is known by themselves as Itneg, but by others and more commonly as Tinguianes. They are a heathen people, living in a settled, orderly manner, but with no tribal organization, and so with only a local, virtually independent, control of their own affairs. Now, I found some bits of evidence that the ancestors of a few of the inhabitants of my town might have been at one time Tinguianes. In neighboring towns traces of the process of assimilation were quite evident in the persons of those "new Christians," as the Spanish phrase has it, namely, those Tinguianes who had cut off their long hair, had embraced the Catholic faith, and been baptized with a "Christian" name in addition to the former single name that they had borne, and so were admitted to the full rights of the town in which they chose to live. The theory which seemed to be accepted most generally, however, has it that the Philippine Islands were originally settled, at a time when civilization was at a very low ebb, by a wave of emigration from the Malay Peninsula and that the pioneers naturally settled along the coast. Later, at a time when civilization was at a slightly higher stage, another wave of emigration took place from the Malay Peninsula, and the last comers drove the first comers back into the mountainous interior of the country, while the newcomers occupied in turn the territory along the coast. Then when the Spaniards came to the islands they exerted all of their Christianizing and civilizing influences upon those whom they found nearest the coast, allowing those in the interior to remain in their original state of savagery, which they have virtually retained to this day.

During the Christmas week which I spent in a Tinguian village, about 10 miles farther in the hills, so far away from real civilization that we found only pitch wood used for illuminating purposes, and so far, also, from a civilized settlement, that hardly a Spanish word was of any avail whatever, I observed quite closely and agreeably the life and customs of the Tinguianes. The village in which we stopped was clean and orderly, the inhabitants were peaceable, unobtrusive, and most hospitable to us, and to all intents and purposes they lead a moral and happy life. They believe in good and bad spirits; that an eclipse is caused by some tribe on the earth eating the sun or moon to satisfy hunger; that thunder and lightning are caused by the striking of a giant flint and steel; one bright little fellow answered my question as to where he would go after he died by saying that while he did not know, I might find out for myself by dying. In the fall of 1904 some systematic school work, mostly industrial in its nature, was begun among these Tinguianes.

The similarity in nature and customs between the Ilocanos among whom I was living and the Tinguianes is perhaps not great, especially in view of the fact that all of the Ilocanos wear at least two full garments and wear their hair cut pompadour. Still, there was not a person in my town who ate his rice or other food with anything but his fingers when he was alone or with his own family. I never saw a Tinguian drunk or indulging in cock fighting, except in or near an Ilocano village. The Tinguian boys in my school made just as good progress, considering their lack of previous training, as any of their more fortunate companions.

At the beginning of the second school year I tried the experiment of putting *the older* and the brighter girls into the room of the man teacher, and of sending *the younger boys into the* room of the woman teacher, with the little girls.

Notwithstanding that this was contrary to all former customs, it worked very well, and allowed much improvement in the work accomplished. What had been the highest class of girls became a part of the second class of boys, since the girls had not shown as much aptitude as the boys. Besides, the former teacher of the boys had early given up his post, realizing that he was too old to take up readily the new ideas, and he had been succeeded by a younger and promising teacher. It had not been the custom to send the girls to school with the same regularity or for as long a period as the boys. As a consequence the number of women who could speak Spanish was much smaller than that of men, and indeed there was no woman in that town beside the teacher who could carry on a conversation in Spanish.

It was during the course of this session, too, that a number of modern American-built school desks were allotted to my school by the insular bureau of education, as well as an additional lot of slates, language books, and geographies. The Filipino teachers now occupied all of their time in teaching what they had acquired during the first year, while I gave most of my attention to the pupils, and the required hour every day to teaching the Filipino teachers. At the end of the year the boys who were farthest along (they were completing the second reader) used to seem to enjoy coming to my house to look at my papers and pictures and to carry on a fairly adequate conversation with me in English. I was the only American with whom they had come into any real contact, too, since my nearest neighbor was 7 miles away.

How to attack the problem which revealed itself to the American teachers as we first confronted the actual conditions in our respective stations, or, indeed, how to get an adequate idea of the very nature of the problem itself in all its novelty and greatness were serious questions when we first went to work. The superintendent was no better informed than the teacher, and consequently we were permitted to work out our own individual solutions to the problem. In view of the independence and freedom that were granted in this respect it may well be strange, and yet also fortunate, that as good results have been secured as are now evident. Of course the foundation work is now virtually accomplished; competent supervisors have been developed among the now experienced American teachers, who are aiding the Filipino teachers and pupils to make the best progress consistent with the conditions.

The trials which the first teachers met with were not limited to those directly connected with seeking the best devices and methods nor to those arising from the necessity of acquiring a new language and a familiarity with new climatic conditions. The question of securing the best, or only suitable, food that was available; the hardships connected with a fluctuating currency, which was used by the civil government for more than two years; the necessity of further adjustment to the rules of the classified civil service when the whole of the bureau of education was taken into that service; and various other difficulties and annoyances that continually arose made it not easy, to say the least, to find nothing but joy or even a reasonable satisfaction at the time in carrying out the experiment to the end. Happily, nearly all of that has now disappeared through the process of crystallization of the best and the better adjustment of the various conflicting interests.

The third school year I spent on the island of Panay, about as far south of Manila as I had been north, and among a different people, the Visayans. First, I had to learn a new dialect, if I wished to be able to talk with the great body of the inhabitants, although it is true that there is much more Spanish culture evident in the southern islands than in the region north of Manila. The progress of the schools under the new régime was greater, also, because of the more favorable conditions of travel and of work. The attitude

of the Filipinos seemed to be more critical, to put it the most mildly, and the difficulties to be overcome were also greater. In Iloilo, which is the second city in the archipelago, the highest of the five classes in the provincial school was reading in the fifth reader in the fall of 1904. They were pursuing other studies, such as arithmetic, United States history, and geography at points much further advanced, however, than this would seem to indicate.

The bureau of education is under the direction of the secretary of public instruction, who is one of the four American members, besides the president, of the United States Philippine Commission. At the head of the bureau is the superintendent of education, who has his office in Manila, in which are also two assistant superintendents and a corps of clerks. Then there are some 35 division superintendents, each of whom is responsible for the school affairs of a single province, as a rule. There are about 900 American teachers in the islands, who are paid from the insular treasury, about seven-eighths of the income of which is derived from the customs receipts and the remainder from the internal-revenue tax. All of the books and supplies are purchased from the same fund, the appropriation each year being between a million and a million and a half dollars. The town authorities, from the proceeds of the local land tax and from fees and licenses, provide and maintain school buildings and pay the salaries of the Filipino teachers, of whom there are some 4,000, under the direction of the division superintendents.

The outlook, notwithstanding all the discouragements and hindrances which loom up so large when they are a part of one's life, but which shrink and disappear in time, is favorable to a healthy growth and development of the school system of the Philippine Islands. It is certain now that they must continue to increase in efficiency and numbers until they are performing their whole duty toward the uplifting of the Filipino people.

CHAPTER XVII.

EDUCATIONAL DIRECTORY.[a]

I.—Chief State School Officers.

Name.	Address.	Official designation.
H. C. Gunnells	Montgomery, Ala	State superintendent of education.
R. L. Long	Phoenix, Ariz	Territorial superintendent of public instruction.
J. J. Doyne	Little Rock, Ark	State superintendent of public instruction.
Edward Hyatt	Sacramento, Cal	Do.
Miss Katherine L. Craig	Denver, Colo	Do.
Charles D. Hine	Hartford, Conn	Secretary of State board of education.
Thomas C. Roe	Dover, Del	Do.
Wm. E. Chancellor	Washington, D. C	Superintendent of District schools.
W. M. Holloway	Tallahassee, Fla	State superintendent of public instruction.
W. B. Merritt	Atlanta, Ga	State school commissioner.
S. Belle Chamberlain	Boise, Idaho	State superintendent of public instruction.
Frank G. Blair	Springfield, Ill	Do.
John D. Benedict	Muscogee, Ind. T	Territorial superintendent of schools.
F. A. Cotton	Indianapolis, Ind	State superintendent of public instruction.
John F. Riggs	Des Moines, Iowa	Do.
E. T. Fairchild	Topeka, Kans	Do.
J. H. Fuqua, sr	Frankfort, Ky	Do.
J. B. Aswell	Baton Rouge, La	State superintendent of public education.
W. W. Stetson	Augusta, Me	State superintendent of public schools.
M. Bates Stephens	Annapolis, Md	State superintendent of public education.
George H. Martin	Boston, Mass	Secretary of State board of education.
Luther L. Wright	Lansing, Mich	State superintendent of public instruction.
J. W. Olsen	St. Paul, Minn	Do.
Henry L. Whitfield	Jackson, Miss	State superintendent of public education.
Howard A. Gass	Jefferson City, Mo	State superintendent of public schools.
W. C. Harmon	Helena, Mont	State superintendent of public instruction.
J. L. McBrien	Lincoln, Nebr	Do.
Orvis Ring	Carson, Nev	Do.
Henry C. Morrison	Concord, N. H	Do.
Chas. J. Baxter	Trenton, N. J	Do.
Hiram Hadley	Santa Fe, N. Mex	Territorial superintendent of public instruction.
Andrew S. Draper	Albany, N. Y	State commissioner of education.
J. Y. Joyner	Raleigh, N. C	State superintendent of public instruction.
W. L. Stockwell	Bismarck, N. Dak	Do.
E. A. Jones	Columbus, Ohio	State commissioner of common schools.
J. E. Dyche	Guthrie, Okla	Territorial superintendent of public instruction.
J. H. Ackerman	Salem, Oreg	State superintendent of public instruction.
Nathan C. Schaeffer	Harrisburg, Pa	Do.
Walter E. Ranger	Providence, R. I	Commissioner of public schools.
O. B. Martin	Columbia, S. C	State superintendent of education.
H. A. Ustrud	Pierre, S. Dak	State superintendent of public instruction.
R. L. Jones	Nashville, Tenn	Do.
R. B. Cousins	Austin, Tex	Do.
A. C. Nelson	Salt Lake City, Utah	Do.
Mason S. Stone	Montpelier, Vt	State superintendent of education.
J. D. Eggleston, jr	Richmond, Va	State superintendent of public instruction.
R. B. Bryan	Olympia, Wash	Do.
Thomas C. Miller	Charleston, W. Va	State superintendent of free schools.
C. P. Cary	Madison, Wis	State superintendent of public schools.
A. D. Cook	Cheyenne, Wyo	State superintendent of public instruction.
Sheldon Jackson	Sitka, Alaska	General agent of education.
W. H. Babbitt	Honolulu, Hawaii	Superintendent of public instruction.
D. P. Barrows	Manila, Philippine Islands.	General superintendent of public instruction.
Roland P. Falkner	San Juan, Porto Rico	Commissioner of education.

[a] Corrected to Oct. 15, 1906, in so far as changes have been reported to the Bureau, except the list of State school officers, which has been corrected to April 15, 1907.

II.—City School Superintendents.

ALABAMA.

Anniston, D. R. Murphy.
Bessemer, Joseph M. Dill.
Birmingham, J. H. Phillips.
Dothan, J. V. Brown.
Eufaula, F. L. McCoy.
Florence, W. W. Hall.
Gadsden, W. E. Striplin.
Girard, W. F. Monk.
Huntsville, S. R. Butler.
Mobile, S. S. Murphy.
Montgomery, Charles L. Floyd.
New Decatur, Arthur F. Harman.
Opelika, George W. Brock.
Phœnix, W. O. Smith.
Pratt City, P. M. McNeil.
Selma, R. E. Hardaway.
Talladega, D. A. McNeil.
Troy, John P. Selman.
Tuscaloosa, James H. Foster.
Woodlawn, George D. Godard.

ARIZONA.

Phoenix, J. F. Stilwell.
Prescott.
Tucson, W. M. Rutherauf.

ARKANSAS.

Fayetteville, F. S. Root.
Fort Smith, J. W. Kuykendall.
Helena, S. H. Spragins.
Hot Springs, George B. Cook.
Jonesboro, D. T. Rogers.
Little Rock, B. W. Torreyson.
Paragould, William E. Skaggs.
Pine Bluff, Junius Jordan.
Texarkana, F. W. Miller.

CALIFORNIA.

Alameda, Fred T. Moore.
Bakersfield, David W. Nelson.
Berkeley, S. D. Waterman.
Eureka, A. C. Barker.
Fresno, C. L. McLane.
Grass Valley, J. S. Hennessy.
Los Angeles, Ernest Carroll Moore.
Napa City, Dee T. Davis.
Oakland, John W. McClymonds.
Pasadena, James D. Graham.
Petaluma.
Pomona, P. W. Kauffman.
Redlands:
School district, A. Harvey Collins (supervising principal).
Lugonia district, D. C. Reed (supervising principal).
Riverside, A. N. Wheelock.
Sacramento, O. W. Erlewine.
San Bernardino, F. W. Conrad.
San Diego, F. P. Davidson.
San Francisco, A. Roncovieri.
San José, George S. Wells.
Santa Ana, J. A. Cranston.

CALIFORNIA—Continued.

Santa Barbara, H. A. Adrian.
Santa Clara, W. J. Hayward.
Santa Cruz, John W. Linscott.
Santa Rosa, E. M. Cox (principal).
Stockton, James A. Barr.
Vallejo, John Davidson.
Watsonville, Irving Townsend.

COLORADO.

Aspen, J. S. Clifford.
Boulder, William V. Casey.
Canyon City, F. F. Thompson.
Colorado Springs, John Deitrich.
Cripple Creek, Wilson M. Shafer.
Denver, Lewis C. Greenlee.
Florence, Philip M. Condit.
Grand Junction, J. H. Allen.
Leadville, Frederick P. Austin.
Pueblo:
District No. 1, George W. Loomis.
District No. 20, John F. Keating.
Salida, Edgar Kesner.
Trinidad, J. P. Treat.
Victor, W. M. Shafer.

CONNECTICUT.

Ansonia, Edwin C. Andrews.
Branford, H. S. Lovejoy.
Bridgeport, Charles W. Deane.
Bristol, Charles L. Wooding.
Danbury, Gilman C. Fisher (secretary board of school visitors).
Derby, J. W. Peck.
East Hartford, Thomas H. De Coudres.
Enfield, George T. Finch (acting visitor).
Glastonbury, Chas. G. Rankin.
Greenwich, Newton B. Hobart (principal), Thomas F. Howley (secretary board school visitors).
Hamden, Charles F. Clarke (secretary school committee).
Hartford, Thomas S. Weaver.
Huntington, W. D. Hood.
Killingly, James M. Paine.
Manchester:
Town schools, Edward D. McCollum.
Ninth district (south), Fred. A. Verplanck.
Meriden, William P. Kelly.
Middletown, C. H. Woolsey.
Naugatuck, Frank W. Eaton.
New Britain, Giles A. Stuart.
New Haven, Frank Herbert Beede.
New London, Charles B. Jennings.
New Milford, John Pettibone.
Norwalk, Abiathar Blanchard (secretary board of school visitors).
Norwich:
Nathan Lee Bishop (superintendent central district).
John B. Stanton (superintendent West Chelsea district).

CONNECTICUT—Continued.

Putnam:
W. R. Barber (secretary board of school visitors).
E. H. Johnson (acting school visitor).
Shelton, W. D. Hood.
Southington, Mrs. Anna D. Pollard.
South Norwalk, W. C. Foote.
Stafford, Alvaredo Howard (chairman).
Stamford, Everett C. Willard.
Stonington, James H. Weeks, jr. (secretary board of school visitors).
Torrington, Edwin H. Forbes.
Vernon, W. B. Foster.
East district, Isaac M. Agard.
Wallingford, W. O. Cartwright, J. E. Wildman (secretary board of school visitors).
Waterbury, B. W. Tinker.
West Haven, Edgar C. Stiles.
Westport, George H. Tracy.
Windham, George K. Anderson (secretary board of school visitors).
Winsted, William H. Millington.

DELAWARE.

Wilmington, George W. Twitmyer.

DISTRICT OF COLUMBIA.

Washington, William E. Chancellor.

FLORIDA.

Fernandina, H. L. Mattais.
Gainesville,
Jacksonville, N. H. Palmer.
Key West, J. V. Harris (county superintendent).
Lake City, T. H. Owens (county superintendent).
Live Oak,
Ocala,
Palatka, L. K. Tucker.
Pensacola, N. B. Cook (county superintendent).
St. Augustine, R. B. Ruthersford.
Tampa, J. W. McClung (county superintendent).

GEORGIA.

Albany, A. J. Barwick.
Americus, A. G. Miller.
Athens, G. G. Bond.
Atlanta, W. F. Slaton.
Augusta, Lawton B. Evans.
Barnesville,
Brunswick, N. H. Ballard.
Columbus, Carleton B. Gibson.
Cordele,
Dalton, J. M. Weatherly.
Dublin, Kyle Terry Alfriend.
Elberton, P. B. Winn.
Gainesville, Charles B. Mathews.
Griffin, E. J. Robeson.

GEORGIA—Continued.

Lagrange, C. L. Smith.
Macon, C. B. Chapman.
Marietta, W. T. Dumas.
Milledgeville, W. E. Reynolds.
Newnan, J. W. Gaines.
Rome, James C. Harris.
Savannah, Otis Ashmore.
Thomasville, W. G. Davis.
Valdosta, R. B. Daniel.
Waycross, E. A. Pound.

IDAHO.

Boise, J. E. Williamson.
Pocatello, Walter R. Siders.

ILLINOIS.

Alton, Robert A. Haight.
Aurora:
District No. 4 (west side), A. V. Greenman.
District No. 5 (east side), C. M. Bardwell.
Batavia, L. F. Wentzel.
Beardstown, J. Gladden Hutton.
Belleville, George H. Busieck.
Belvidere:
North side, E. D. Merriman.
South side, C. H. Levitt.
Bloomington, J. K. Stableton.
Blue Island, J. E. Lemon.
Cairo, Taylor C. Clendenen.
Canton, G. W. L. Meeker.
Centralia, S. H. Bohn.
Champaign, Frank D. Haddock.
Charleston, De Witt Elwood.
Chicago, Edwin G. Cooley.
Chicago Heights, F. M. Richardson.
Clinton, Frank L. Horn.
Collinsville, Samuel J. Curlee.
Danville, L. H. Griffith.
Decatur, Enoch A. Gastman.
De Kalb, Newell D. Gilbert.
Dixon:
South Dixon, Vernon G. Mays.
North Dixon, H. V. Baldwin.
Duquoin, Charles W. Houk.
East St. Louis, John E. Miller.
Edwardsville, T. M. Birney.
Effingham, C. W. Jerkes.
Elgin, M. A. Whitney.
Evanston:
District No. 75, Homer H. Kingsley.
District No. 76, South Evanston, Fred W. Nichols.
Freeport, S. E. Raines.
Galena, P. H. Clark.
Galesburg, William L. Steele.
Harlem, Frank Curtis.
Harvey, F. L. Miller.
Hoopeston, Arthur Verner.
Jacksonville, W. A. Furr.
Jerseyville, J. Pike.

ILLINOIS—Continued

Joliet, John A. Long.
Kankakee, F. N. Tracy.
Kewanee, J. N. Adee.
Lagrange, F. E. Sanford.
La Salle, J. B. McManus.
Lincoln, L. D. Ellis.
Litchfield, C. E. Richmond.
Macomb, W. W. Earnest.
Maywood, J. Porter Adams.
Mattoon, G. P. Randle.
Mendota, W. R. Foster.
Metropolis City, T. F. McCartney.
Moline, Gerard T. Smith.
Monmouth, F. H. Bloodgood.
Morris, Rupert Simpkins.
Mount Carmel, W. S. Booth.
Mount Vernon, E. E. Van Cleve.
Murphysboro, William Calhoun.
Normal, E. A. Fritter.
Olney, J. O. Marberry.
Ottawa, C. J. Byrne.
Pana, William Miner.
Paris, H. W. Monical.
Pekin, James J. Crosby.
Peoria, Gerard D. Smith.
Peru, Ira M. Ong.
Pontiac, C. E. De Butts.
Princeton, M. G. Clark.
Quincy, D. B. Rawlins.
Rockford, P. R. Walker.
Rock Island, Herbert B. Hayden.
Springfield, Edward Anderson.
Spring Valley, C. P. Hulce.
Sterling:
  District No. 3 (the Sterling schools), H. L. Chaplin.
  District No. 10 (the Wallace schools), Miss A. Laurie Hill.
Streator, M. G. Clark.
Sycamore, H. A. Bone.
Taylorville:
  East side, Henry L. Fowkes.
  West side, H. N. Foltz.
Urbana, J. W. Hays.
Waukegan, W. J. Stebbins.

INDIANA.

Alexandria, O. M. Pittenger.
Anderson, J. B. Pearcy.
Bedford, J. B. Fagan.
Bloomington, James K. Beck.
Bluffton, W. A. Wirt.
Brazil, L. B. O'Dell.
Columbus, T. F. Fitzgibbon.
Connersville, L. D. Coffman.
Crawfordsville, William A. Millis.
Decatur, William Beachler.
East Chicago, Edwin N. Canine.
Elkhart, Ellis H. Drake.
Elwood, Charles S. Meek.
Evansville, Frank W. Cooley.
Fort Wayne, Justin N. Study.
Frankfort, Edwin S. Monroe.
Franklin, H. B. Wilson.

INDIANA—Continued.

Garrett, Francis M. Merica.
Gas City, J. H. Jeffrey.
Goshen, Victor W. B. Hedgepeth.
Greenfield, W. C. Goble.
Greensburg, Elmer C. Jerman.
Hammond, C. M. McDaniel.
Hartford City, Finley Geiger.
Huntington, W. P. Hart.
Indianapolis, Calvin N. Kendall.
Jeffersonville, C. M. Marble.
Kokomo, Robert A. Ogg.
Lafayette, R. F. Hight.
Laporte, John A. Wood.
Lawrenceburg, Jesse W. Riddle.
Lebanon, H. G. Brown.
Linton, Joseph H. Haseman.
Logansport, Albert H. Douglass.
Madison, A. O. Neal.
Marion, Benjamin F. Moore.
Martinsville, J. E. Robinson.
Michigan City, L. W. Keeler.
Mishawaka, J. F. Nuner.
Montpelier, L. E. Kelley.
Mount Vernon, Edward G. Bauman.
Muncie, George L. Roberts.
New Albany, C. A. Prosser.
Noblesville, John A. Carnagey.
Peru, A. A. Campbell.
Plymouth, R. A. Randall.
Portland, Grant E. Derbyshire.
Princeton, Harold Barnes.
Richmond, Thomas A. Mott.
Rushville, J. H. Scholl.
Seymour, H. C. Montgomery.
Shelbyville, James H. Tomlin.
South Bend, Calvin Moon.
Terre Haute, P. W. Morgan.
Tipton, C. F. Patterson.
Valparaiso, Arthur A. Hughart.
Vincennes, R. I. Hamilton.
Wabash, Adelaide S. Baylor.
Warsaw, J. J. Early.
Washington, William F. Axtell.
Whiting, John C. Hall.

INDIAN TERRITORY.

Ardmore, Charles Evans.
Chickasha, W. S. Staley.
Durant, C. L. Neely.
McAlester, William Gay.
Muscogee, Charles W. Briles.
South McAlester,

IOWA.

Albia, F. E. George.
Atlantic, Carlos M. Cole.
Boone, J. C. King.
Burlington, Francis M. Fultz.
Cedar Falls, D. M. Kelly.
Cedar Rapids, J. J. McConnell.
Centerville, E. N. Gibson.
Chariton, C. J. Johnson.
Charles City, C. A. Kent.
Cherokee, L. H. Maus.

IOWA—Continued.

Clarinda, Willard E. Salisburg.
Clinton, O. P. Bostwick.
Council Bluffs, W. N. Clifford.
Creston, O. E. French.
Davenport, J. B. Young.
Decorah, Henry C. Johnson.
Des Moines:
East Side, R. J. Hartung.
West Side, W. O. Riddell.
Capital Park, J. R. McComb.
Dubuque, F. T. Oldt.
Fairfield, S. A. Power.
Fort Dodge, George H. Mullin.
Fort Madison, C. W. Cruikshank.
Grinnell, Eugene Henely.
Independence,
Iowa City, A. V. Storm.
Keokuk, William Aldrich.
Lemars, Thomas B. Hutton.
Marion, G. E. Finch.
Marshalltown, Elmer L. Coffeen.
Mason City, W. A. Brandenburg.
Missouri Valley, J. H. Beveridge.
Mount Pleasant, Bruce Francis.
Muscatine, W. F. Chevalier.
Newton, E. J. H. Beard.
Oelwein, O. W. Herr.
Oskaloosa, F. W. Else.
Ottumwa, A. W. Stuart.
Perry, W. B. Thornburgh.
Redoak, George S. Dick.
Shenandoah,
Sioux City, W. M. Stevens.
Washington, R. B. Crone.
Waterloo:
East Side, Fred D. Merritt.
West Side, A. T. Hukill.
Webster City, L. H. Ford.

KANSAS.

Argentine, H. P. Butcher.
Arkansas City, L. W. Mayberry.
Atchison, Nathan T. Veatch.
Chanute, J. H. Adams.
Cherryvale, A. J. Lovett.
Coffeeville, William M. Sinclair.
Concordia, A. F. Senter.
Emporia, L. A. Lowther.
Fort Scott, David M. Bowen.
Galena, Leslie T. Huffman.
Horton, W. W. Wood.
Hutchinson, R. R. Price.
Independence, C. S. Risdon.
Iola, Miss Clifford A. Mitchell.
Junction City, William S. Heusner.
Kansas City, M. E. Pearson.
Lawrence, Frank P. Smith.
Leavenworth, George W. Kendrick.
Manhattan,
Newton, David F. Shirk.
Osawatomie, C. L. Williams.
Ottawa, A. L. Bell.
Parsons, J. A. Higdon.
Pittsburg, A. H. Bushey.

KANSAS—Continued.

Rosedale, G. E. Rose.
Salina, George R. Crissman.
Topeka, L. D. Whittemore.
Wellington, W. M. Massey.
Wichita, R. F. Knight.
Winfield, J. W. Spindler.

KENTUCKY.

Ashland, John Grant Crabbe.
Bellevue, H. L. Eby.
Bowling Green, T. C. Cherry.
Covington, K. J. Morris.
Danville, W. C. Grinstead (principal of high school).
Dayton, G. W. Gurney.
Frankfort, H. C. McKee.
Georgetown, R. L. Garrison.
Henderson, Livingston McCartney.
Hopkinsville, Barksdale Hamlett.
Lexington, M. A. Cassidy.
Louisville, Edgar H. Mark.
Madisonville, Ralph B. Rubins.
Maysville, D. S. Clinger (principal of high school).
Middlesboro, M. O. Winfrey.
Newport, Ellsworth Regenstein.
Owensboro, W. A. Barnes.
Paducah, C. M. Lieb.
Paris, George W. Chapman.
Richmond, H. H. Brock.
Somerset, J. B. W. Brouse.
Winchester, R. M. Shiff.

LOUISIANA.

Alexandria, H. H. Harper (principal).
Baton Rouge, T. H. Harris.
Crowley, E. B. Stover.
Donaldsonville, D. B. Showalter (parish superintendent).
Houma, William P. Tucker.
Lake Charles, B. F. Dudley.
Monroe, George W. Reid.
New Iberia, J. C. Ellis.
New Orleans, Warren Easton.
Shreveport, ——— Blanton.

MAINE.

Auburn, Payson Smith.
Augusta:
Mrs. A. H. D. Hanks (superintendent suburban and high schools).
Weston Lewis (principal Williams district).
Bangor, Charles E. Tilton.
Bath, Frederick W. Freeman.
Belfast, Alonzo J. Knowlton.
Biddeford, Royal E. Gould.
Brewer, Charles N. Perkins.
Brunswick, Charles M. Pennell.
Calais, Ashley St. Clair.
Eastport, Charles S. Sewall.
Ellsworth, R. E. Mason.

MAINE—Continued.

Gardiner, Charles O. Turner.
Houlton, F. L. Putnam.
Lewiston, I. C. Phillips.
Oldtown, D. L. Wormwood.
Portland, W. H. Brownson.
Rockland, H. H. Randall.
Saco, John S. Locke.
Sanford, Austin R. Paull.
Skowhegan, D. W. Colby.
South Portland, James Otis Kaler.
Waterville, Elwood T. Wyman.
Westbrook, Fred. Benson.

MARYLAND.

Annapolis, H. R. Wallis (county superintendent), W. S. Crouse (principal).
Baltimore, J. H. Van Sickle.
Cambridge, W. P. Beckwith.
Cumberland, A. C. Willison (county superintendent).
Frederick, Ephraim L. Boblitz (county superintendent.)
Frostburg, Olin R. Rice (principal of high school).
Hagerstown, John P. Fockler (county superintendent).
Salisbury, H. C. Bounds.

MASSACHUSETTS.

Abington, C. A. Record.
Adams, Francis A. Bagnall.
Amesbury, Charles E. Fish.
Amherst, Audubon L. Hardy.
Andover, Corwin F. Palmer.
Arlington, Frank S. Sutcliffe.
Athol, W. Scott Ward.
Attleboro, Lewis A. Fales.
Barnstable, G. H. Galger.
Belmont, George P. Armstrong.
Beverly, Adelbert Leon Safford.
Blackstone, J. P. McCooey.
Boston, Stratton D. Brooks.
Braintree, John C. Anthony.
Bridgewater, C. A. Record.
Brockton, B. B. Russell.
Brookline, George I. Aldrich.
Cambridge, William C. Bates.
Canton, James S. Perkins.
Chelmsford, Frederic L. Kendall.
Chelsea, B. C. Gregory.
Chicopee, John C. Gray.
Clinton, Charles L. Hunt.
Concord, William L. Eaton.
Danvers, Arthur J. Collins.
Dartmouth, Charles E. Soule (secretary of school committee).
Dedham, Roderick Whittlesey Hine.
Easthampton, W. D. Miller.
Easton, Frederic L. Pope, jr.
Everett, U. G. Wheeler.
Fairhaven, Frank M. Marsh.
Fall River, Everett B. Durfee.
Fitchburg, Joseph G. Edgerly.
Framingham, Samuel F. Blodgett.

MASSACHUSETTS—Continued.

Franklin, Irving H. Gamwell.
Gardner, Judson I. Wood.
Gloucester, Freeman Putney.
Grafton, Robert O. Small.
Great Barrington, H. Dressel, jr.
Greenfield, G. H. Danforth.
Haverhill, George E. Gay.
Hingham, Nelson G. Howard.
Holyoke, J. J. O'Connell.
Hudson, C. S. Lyman.
Hyde Park, George E. Johnson.
Ipswich, Robert M. Martin.
Lawrence, B. M. Sheridan.
Lee, Preston Barr.
Leominster, Thomas E. Thompson.
Lexington, George P. Armstrong.
Lowell, Arthur K. Whitcomb.
Ludlow,
Lynn, Frank J. Peaslee.
Malden, Henry D. Hervey.
Manchester, Charles E. Fish.
Mansfield, Edward P. Fitts.
Marblehead, John B. Gifford.
Marlboro, O. A. Morton.
Maynard, John C. Mackin.
Medford, Charles H. Morss.
Melrose, Fred H. Nickerson.
Merrimac, George E. Chickering.
Methuen, Charles A. Breck.
Middleboro, Charles H. Bates.
Milford, Charles W. Haley.
Millbury, Watson C. Lea (post-office, Oxford).
Milton, Asher J. Jacoby (post-office, East Milton).
Monson, Frederic A. Wheeler.
Montague, Frank P. Davison (post-office, Turners Falls).
Natick, Albert L. Barbour.
Needham, Henry M. Walradt.
New Bedford, William E. Hatch.
Newburyport, Edgar L. Millard.
Newton, Frank E. Spaulding.
North Adams, Isaac Freeman Hall.
Northampton, Schuyler F. Herron.
North Andover, Wallace E. Mason.
North Attleboro, James W. Brehant.
Northbridge, S. A. Melcher.
North Brookfield, B. G. Merriam.
Norwood, William C. Hobbs.
Orange, Edward Dixon.
Palmer, Robert J. Fuller.
Peabody, Albert Robinson.
Pittsfield, Charles A. Byram.
Plymouth, Francis J. Heavens.
Provincetown, Alvan R. Lewis.
Quincy, Frank Edson Parlin.
Randolph, John E. Bradley.
Reading, Melville A. Stone.
Revere, Wm. H. Winslow.
Rockland, William L. Coggins.
Rockport, William F. Eldredge.
Salem, John Wright Perkins.
Saugus, Charles E. Stevens.
Somerville, Gordon A. Southworth.
Southbridge, Fred E. Corbin.

MASSACHUSETTS—Continued.

South Hadley, Frederick E. Whittemore.
Spencer, Charles F. Adams.
Springfield, Wilbur F. Gordy.
Stoneham, Charles E. Stevens.
Stoughton, Edward P. Fitts.
Swampscott, Robert M. Martin.
Taunton, H. W. Harrub.
Tewksbury, S. Howard Chace.
Upton, R. O. Small.
Wakefield, Alfred C. Thompson.
Walpole,
Waltham, William D. Parkinson.
Ware, George W. Cox.
Warren, Parker T. Pearson.
Watertown, Frank R. Page.
Webster, E. W. Robinson.
Wellesley, Marshall Livingston Perrin.
Westboro, H. C. Waldron.
Westfield, Charles L. Simmons.
West Springfield, C. E. Brockway.
Weymouth, Elmer E. Sherman.
Whitman, Henry M. Walradt.
Williamstown, Walter G. Mitchell.
Winchendon, Wilbur B. Sprague.
Winchester, Robert C. Metcalf.
Winthrop, Frank A. Douglas.
Woburn, George I. Clapp.
Worcester, Homer P. Lewis.

MICHIGAN.

Adrian, Charles W. Mickens.
Albion, W. J. McKone.
Alpena, George A. Hunt.
Ann Arbor, H. M. Slauson.
Battle Creek, William G. Coburn.
Bay City, John A. Stewart.
Benton Harbor, William R. Wright.
Bessemer, Miss A. F. Olcott.
Big Rapids, Arthur S. Hudson.
Cadillac, G. A. McGee.
Calumet, H. E. Kratz.
Charlotte, M. R. Parmelee.
Cheboygan, Allen F. Wood.
Coldwater, Robert I. White.
Detroit, Wales C. Martindale.
Dowagiac, Warren E. Conkling.
Escanaba, F. D. Davis.
Flint, A. N. Cody.
Gladstone, J. H. McDonald.
Grand Haven, Edward P. Cummings.
Grand Rapids, W. A. Greeson.
Hancock, Eugene La Rowe.
Hillsdale, S. J. Gier.
Holland, W. T. Bishop.
Houghton, John A. Doelle.
Ionia, C. L. Bemis.
Iron Mountain, L. E. Amidon.
Ironwood, L. L. Wright.
Ishpeming, E. E. Scribner.
Jackson, L. S. Norton.
Kalamazoo, S. O. Hartwell.
Lansing, W. D. Sterling.
Ludington, Guy D. Smith.
Manistee, Samuel W. Baker.

MICHIGAN—Continued.

Manistique, W. E. Hanson.
Marine City, H. A. Markham.
Marquette, Kendall P. Brooks.
Marshall, Ralph S. Garwood.
Menominee, R. H. Kirtland.
Monroe, F. J. S. Tooze.
Mount Clemens, John P. Everett.
Mount Pleasant, A. F. Wood.
Muskegon, Joseph M. Frost.
Negauzee, Orr Schurtz.
Niles, J. D. Schiller.
Norway, Charles E. Cullen.
Owosso, J. W. Simmons.
Petoskey, H. M. Elliot.
Pontiac, James H. Harris.
Port Huron, W. F. Lewis.
Saginaw:
East Side, E. C. Warriner.
West Side, Phil. Huber.
St. Joseph, Ernest P. Clarke.
Sault Ste. Marie, E. E. Ferguson.
South Haven, A. D. Prentice.
Three Rivers, Edward M. McElroy.
Traverse City, I. B. Gilbert.
Wyandotte, F. H. Sooy.
Ypsilanti, Wm. B. Arbaugh.

MINNESOTA.

Albert Lea, E. M. Phillips.
Anoka, T. J. Sperry.
Austin, George A. Franklin.
Brainerd, T. B. Hartley.
Cloquet, W. C. Cobb.
Crookston, E. E. McIntire.
Duluth, Robert E. Denfield.
Ely, C. L. Newberry.
Eveleth, Burton O. Greening.
Faribault, Virgil L. Jones.
Fergus Falls, F. E. Lurton.
Hastings, Edgar L. Porter.
Little Falls, H. E. White.
Mankato, James M. McConnell.
Minneapolis, Charles M. Jordan.
Moorhead,
New Ulm, E. T. Critchett.
Owatonna, P. J. Kuntz.
Red Wing, W. F. Kunze.
Rochester, Lester S. Overholt.
St. Cloud, A. N. Farmer.
St. Paul, S. L. Heeter.
St. Peter, V. R. Wasson.
Stillwater, Darius Steward.
Virginia, Lafayette Bliss.
Willmar, P. C. Towning.
Winona, Charles R. Frazier.

MISSISSIPPI.

Biloxi, J. H. Owings.
Canton,
Columbus, S. M. Nash.
Corinth, W. P. Dobbins.
Greenville, E. E. Bass.
Gulfport,

MISSISSIPPI—Continued.

Hattiesburg, F. B. Woodley.
Jackson, Edward L. Bailey.
Laurel, W. L. Abbott.
McComb, Henry P. Hughes.
Meridian, J. C. Fant.
Natchez, J. Reese Lin.
Vicksburg, J. P. Carr.
Water Valley, W. W. Phelan.
Yazoo City, M. Rose.

MISSOURI.

Aurora, M. F. Butler.
Boonville, M. A. O'Rear.
Brookfield, J. U. White.
Cape Girardeau, Fred. L. MacChesney.
Carterville, O. N. Waltz.
Carthage, J. M. White.
Chillicothe, Frank L. Wiley.
Clinton, Arthur Lee.
Columbia, W. H. Hays.
Desoto, W. C. Ogier.
Fulton, J. C. Humphreys.
Hannibal, R. B. D. Simonson.
Independence, W. J. Johnson.
Jefferson City, J. N. Tankersley.
Joplin, L. J. Hall.
Kansas City, James M. Greenwood.
Kirksville, Harry H. Laughlin.
Lexington, W. J. Patterson.
Louisiana, Miss Elizabeth Whitaker.
Macon, William A. Annin.
Marshall, E. J. Scott.
Maryville, C. A. Hawkins.
Mexico, L. B. Hawthorne.
Moberly, J. C. Lilly.
Nevada, J. W. Storms.
Poplar Bluff, William N. Pace.
Richhill, L. F. Robinson.
St. Charles, Joseph Herring.
St. Joseph, J. A. Whiteford.
St. Louis, F. Louis Soldan.
Sedalia, G. V. Buchanan.
Springfield, Jonathan Fairbanks.
Trenton, C. A. Green.
Warrensburg, W. E. Morrow.
Webb City, R. S. Nichols.

MONTANA.

Anaconda, William K. Dwyer.
Bozeman, Risdon J. Cunningham.
Butte, R. G. Young.
Great Falls, S. D. Largent.
Helena, Randall J. Condon.
Missoula, J. Ulysses Williams.

NEBRASKA.

Beatrice, C. A. Fulmer.
Fremont, W. H. Gardner.
Grand Island, Robert J. Barr.
Hastings, J. D. French.
Kearney, George Burgert.
Lincoln, W. L. Stephens.

NEBRASKA—Continued.

Nebraska City, N. Sinclair.
Norfolk, E. J. Bodwell.
North Platte, Paul Goss.
Omaha, W. M. Davidson.
Plattsmouth, E. L. Rouse.
South Omaha, J. Arnott McLean.
York, Charles O. Stewart.

NEVADA.

Reno, E. E. Winfrey.

NEW HAMPSHIRE.

Berlin, G. H. Whitcher.
Claremont, W. H. Cummings.
Concord (Union district), Louis J. Rundlett; (Penacook district No. 20), H. C. Sanborn.
Dover, A. H. Keyes.
Exeter, John A. Brown (chairman school board).
Franklin, H. C. Sanborn.
Keene (Union district), George A. Keith.
Laconia, J. H. Blaisdell.
Littleton, M. C. Smart.
Manchester, Charles W. Bickford.
Nashua, James H. Fassett.
Portsmouth, Ernest L. Silver.
Rochester, William H. Slayton.
Somersworth, C. C. Ferguson.

NEW JERSEY.

Asbury Park, Fred S. Shepherd.
Atlantic City, Charles B. Boyer.
Bayonne, James H. Christie.
Bloomfield, George Morris.
Boonton, M. P. Reagle (principal).
Bordentown, William Macfarland.
Bridgeton, E. J. Hitchner.
Burlington, Wilbur Watts.
Camden, James E. Bryan.
Dover, J. Howard Hulsart (supervising principal).
East Orange, Vernon L. Davey.
Elizabeth, William J. Shearer.
Englewood, Elmer C. Sherman.
Garfield, Thomas Colby.
Gloucester, William C. Sullivan.
Hackensack, Isaac A. Demarest.
Harrison, James F. Prendergast.
Hoboken, A. J. Demarest.
Irvington, F. H. Morrell.
Jersey City, Henry Snyder.
Kearney, Don C. Bliss (post-office, Arlington).
Lambertville, Alex. P. Kerr (supervising principal).
Long Branch, Christopher Gregory.
Madison, A. F. Stauffer.
Millville, H. F. Stauffer.
Montclair, Randall Spaulding.
Morristown, W. L. R. Haven.
Newark, Addison B. Poland.

NEW JERSEY—Continued.

New Brunswick, William Clinton Armstrong.
Newton, Charles J. Majory (supervising principal).
North Plainfield, Henry C. Krebs (supervising principal).
Orange, James J. Riggs.
Passaic, O. I. Woodley.
Paterson, John R. Wilson.
Perth Amboy, S. E. Shull.
Phillipsburg, H. Budd Howell.
Plainfield, Henry M. Maxson.
Princeton, J. M. Arnold.
Rahway, William J. Bickett.
Redbank, S. V. Arrowsmith.
Ridgewood, W. T. Whitney.
Rutherford, Stephen B. Gilhuly.
Salem,
Somerville, William A. Ackerman.
South Amboy, R. M. Fitch (supervising principal).
South Orange, H. W. Foster.
Summit, Miss Louise Connolly (supervising principal).
Town of Union, Otto Ortel (post-office, Weehawken).
Trenton, Ebenezer Mackey.
Vineland, J. J. Unger.
Westfield, J. J. Savitz.
West Hoboken, Robert Waters.
West New York, Wm. M. Van Sickle.
West Orange, A. H. Sherman.
Woodbury, William A. Storrie.

NEW MEXICO.

Albuquerque, J. E. Clark.
Las Vegas,
Raton, A. D. Hoenshel.
Santa Fe, J. A. Wood.

NEW YORK.

Albany, Charles W. Cole.
Albion, Willis G. Carmer.
Amsterdam, Harrison T. Morrow.
Auburn, Alfred C. Thompson.
Ballston Spa, A. A. Lavery (supervising principal).
Batavia, John Kennedy.
Bath, J. Schuyler Fox.
Binghamton, J. Edward Banta.
Buffalo, Henry P. Emerson.
Canandaigua, J. Carlton Norris.
Catskill, J. T. P. Calkins.
Cohoes, Edward Hayward.
Corning:
District No. 9, Leigh R. Hunt.
District No. 13, A. M. Blodgett (principal).
Cortland, Ferdinand E. Smith.
Dansville, E. J. Bonner.
Dunkirk, George M. Wiley.
Elmira, W. J. Deans.

NEW YORK—Continued.

Fishkill on Hudson, W. J. Millar (supervising principal).
Fredonia, Mary F. Lord (principal).
Fulton, J. R. Fairgrieve.
Geneva, William H. Truesdale.
Glens Falls, E. W. Griffith.
Gloversville, James A. Estee.
Gouverneur, J. B. Lardlaw.
Granville, Raymond E. Brown.
Green Island, James Heatly.
Haverstraw, L. O. Markham.
Hempstead, H. H. Chapman.
Herikmer, C. L. Mosher.
Hoosick Falls, H. H. Snell.
Hornellsville, Elmer S. Redman.
Hudson, Charles S. Williams.
Ilion, Frank D. Warren.
Ithaca, F. D. Boynton.
Jamestown, Rovillus R. Rogers.
Johnstown, Frank W. Jennings.
Kingston, S. R. Shear.
Lancaster, W. J. Barr (principal).
Lansingburg, George F. Sawyer.
Lestershire, Frank M. Smith.
Little Falls, A. J. Merrell.
Lockport, Emmet Belknap.
Lyons, W. H. Kinney.
Malone, Miss Sarah L. Perry.
Mamaroneck, George J. McAndrew (supervising principal).
Matteawan, Earlman Fenner (principal).
Mechanicsville, L. B. Blakeman.
Medina, James C. Van Etten.
Middletown, James F. Tuthill.
Mount Vernon, Charles E. Nichols.
Newark, Charles A. Hamilton (principal).
Newburg, James M. Crane.
New Rochelle, Isaac E. Young.
New York, William H. Maxwell.
Niagara Falls, R. A. Taylor.
North Tarrytown, L. W. Craig (principal).
North Tonawanda, R. A. Searing.
Norwich, Stanford J. Gibson.
Nyack, Ira H. Lawton.
Ogdensburg, H. H. Southwick.
Olean, Delmer E. Bacheller.
Oneida, Avery Warner Skinner.
Onconta, William C. Franklin.
Ossining, W. H. Ryan.
Oswego, George E. Bullis.
Owego, Francis C. Byrn.
Peekskill:
District No. 7 (Drumhill), Wilbur L. Ellis.
District No. 8 (Oakside), A. D. Dunbar.
Penn Yan, N. Winton Palmer.
Plattsburg, Frank K. Watson.
Port Chester, E. G. Lantman.
Port Jervis, John M. Dolph.
Potsdam, Lewis E. Roberts (principal).
Poughkeepsie, Wm. Alexander Smith.
Rensselaer, A. R. Coulson.
Rochester, Clarence F. Carroll.
Rome, Lewis N. Crane.
Rye, Forrest T. Shults.

NEW YORK—Continued.

Salamanca, Thomas Stone Bell.
Sandy Hill, Frances A. Tefft (principal).
Saratoga Springs, Thomas R. Knell.
Schenectady, J. T. Freeman.
Seneca Falls, E. K. Van Allen.
Solvay, C. O. Richards.
Syracuse, A. B. Blodgett.
Tarrytown, L. V. Case (principal).
Tonawanda, Frank K. Sutley.
Troy, G. F. Sawyer.
Utica, Martin G. Benedict.
Waterloo, H. B. Smith.
Watertown, Frank S. Tisdale.
Watervliet, Russell H. Bellows.
Waverly, E. B. Robbins.
Wellsville,
Whitehall, Wilber W. Howe.
White Plains, Guy Halsey Baskerville.
Yonkers, Charles E. Gorton.

NORTH CAROLINA.

Asheville, R. J. Tighe.
Burlington, Frank H. Curtis.
Charlotte, Alexander Graham.
Concord, Walter Thompson.
Durham, J. A. Matheson.
Elizabeth City, W. M. Hinton.
Fayetteville, B. T. McBryde.
Gastonia, Joe S. Wray.
Goldsboro, Eugene C. Brooks.
Greensboro, W. H. Swift.
Henderson, J. T. Alderman.
High Point, George H. Crowell.
Kinston, L. C. Brogden.
Newbern, H. B. Craven.
Raleigh, Edward P. Moses.
Salisbury, I. C. Griffin.
Washington, Harry Howell.
Wilmington, John J. Blair
Wilson, Gray R. King.
Winston-Salem, W. S. Snipes.

NORTH DAKOTA.

Bismarck, William Moore.
Fargo, W. E. Hoover.
Grand Forks.
Jamestown, C. C. Schmidt.
Minot, S. Henry Wolfe.
Valley City, G. W. Hanna.

OHIO.

Akron, Henry V. Hotchkiss.
Alliance, John E. Morris.
Ashland, E. P. Dean.
Ashtabula, R. P. Clark.
Barberton, James M. Carr.
Barnesville, Lewis Edwin York.
Bellaire, J. R. Anderson.
Bellefontaine, John W. Mackinnon.
Bellevue, E. F. Warner.
Bowling Green, N. D. O. Wilson.
Bridgeport, S. A. Gillett.
Bucyrus, J. J. Bliss.

OHIO—Continued.

Cambridge, H. Z. Hobson.
Canal Dover, Franklin P. Geiger.
Canton, John K. Baxter.
Chillicothe, M. E. Hard.
Cincinnati, F. B. Dyer.
Circleville, C. L. Boyer
Cleveland, W. H. Elson.
Collinwood, Frank P. Whitney.
Columbus, Jacob A. Shawan.
Conneaut, C. T. Northrop.
Coshocton, H. S. Platt.
Dayton, John W. Carr.
Defiance, F. E. Reynolds.
Delaware, W. McK. Vance.
Delphos, T. W. Shimp.
Dennison, W. N. Angel.
East Liverpool, Robert E. Rayman.
Elyria, W. R. Comings.
Findlay, J. W. Zellar.
Fostoria, S. H. Layton.
Fremont, J. E. Collins.
Galion, I. C. Guinther.
Gallipolis, H. E. Conard.
Glenville, H. H. Cully.
Greenfield, E. W. Patterson.
Greenville, W. S. Rowe.
Hamilton, Darrell Joyce.
Hillsboro, F. H. Warren.
Ironton, S. P. Humphrey.
Jackson, J. E. Kinnison.
Kent, A. B. Stutzman.
Kenton, N. E. Hutchinson.
Lancaster, H. A. Cassidy.
Lima, John Davison.
Lorain, A. C. Eldredge.
Mansfield, C. L. Van Cleve.
Marietta, J. V. McMillan.
Marion, H. L. Frank.
Martins Ferry, F. W. Wenner.
Massillon, C. L. Cronebaugh.
Miamisburg, W. T. Trump.
Middletown, Arthur Powell.
Mount Vernon, J. G. Leland.
Napoleon,
Nelsonville, Aaron Grady.
Newark, J. D. Simkins.
Newburg, B. F. Stevenson.
New Philadelphia, G. C. Maurer.
Niles, Frank J. Roller.
North Baltimore, B. O. Martin.
Norwalk, A. D. Beechy.
Norwood, W. S. Cadman.
Oberlin, Ward H. Nye.
Painesville, F. H. Kendall.
Piqua, C. W. Bennett.
Pomeroy, C. T. Coates.
Portsmouth, J. I. Hudson.
Ravenna, E. O. Trescott.
St. Bernard, U. L. Mouce.
St. Marys, E. A. Hotchkiss.
Salem, Jesse L. Johnson.
Sandusky, H. B. Williams.
Shelby, S. H. Maharry.
Sidney, H. R. McVay.
Springfield, Carey Boggess.

OHIO—Continued.

Steubenville, Edward M. Van Cleve.
Tiffin, Charles A. Krout.
Toledo, Henry J. Eberth.
Toronto, S. K. Mardis.
Troy, Mark Wilcox.
Uhrichsville, L. E. Everett.
Urbana, I. N. Keyser.
Vanwert, J. P. Sharkey.
Wapakoneta, H. H. Helter.
Warren, C. E. Carey.
Washington C. H., James T. Tuttle.
Wellston, E. S. McCall.
Wellsville, James L. MacDonald.
Wilmington,
Wooster, Charles Haupert.
Xenia, Edwin B. Cox.
Youngstown, N. H. Chaney.
Zanesville, W. D. Lash.

OKLAHOMA.

Elreno, F. N. Howell.
Enid, T. W. B. Everhart.
Guthrie, Frank E. Buck.
Oklahoma, Ed. S. Vaught.
Perry, William Z. Smith.
Ponca, Richard E. Tope.

OREGON.

Astoria, A. L. Clark.
Baker City, J. A. Churchill.
Eugene, Mott H. Arnold.
Pendleton, L. R. Traver.
Portland, Frank Rigler.
Salem, J. M. Powers.
The Dalles, J. S. Landers.

PENNSYLVANIA.

Allegheny, John Morrow.
Allentown, Francis D. Raub.
Altoona, H. J. Wightman.
Archbald, W. A. Kelly.
Ashland, William C. Estler.
Ashley, E. D. Bovard.
Athens, George E. Rogers.
Bangor, John W. Gruver (principal).
Beaverfalls, Edward Maguire.
Bellefonte, John D. Meyer (supervising principal).
Bellevue, C. C. Williamson.
Berwick, J. W. Snyder (supervising principal).
Bethlehem, Fred W. Robbins.
Blakely, H. B. Anthony (supervising principal; post-office, Peckville).
Bloomsburg, L. P. Sterner (supervising principal).
Braddock, Grant Norris.
Bradford, E. E. Miller.
Bristol, Louise D. Baggs.
Butler, John A. Gibson.
Carbondale, Elmer E. Garr.
Carlisle, John C. Wagner.
Carnegie, W. S. Bryan (principal).
Catasauqua, H. J. Reinhard (principal).

PENNSYLVANIA—Continued.

Chambersburg, Samuel Gelwix.
Charlerol, W. D. Wright.
Chester, A. Duncan Yocum.
Clearfield, H. E. Trout.
Coatesville, W. T. Gordon.
Columbia, Daniel Fleisher.
Connellsville, J. P. Wiley (principal).
Conshohocken, E. B. Ziegler.
Corry, Virgil G. Curtis.
Danville, U. L. Gordy.
Darby, Charles P. Sweeny.
Dickson City, John E. Williams.
Donora, J. D. Boydston.
Dubois, J. H. Alleman.
Dunmore, C. F. Hoban.
Duquesne, H. E. Winner (principal).
Duryea, F. J. Regan.
Easton, William W. Cottingham.
Edwardsdale, J. O. Hermann.
Erie, H. C. Missimer.
Etna, J. Q. A. Irvine (principal).
Forest City, C. T. Thorpe (principal).
Franklin, Charles E. Lord.
Freeland, E. F. Hanlon.
Gilberton, Michael J. Shore (principal).
Greensburg, Thomas S. March.
Greenville, James J. Palmer.
Hanover, J. C. Carey.
Harrisburg, F. E. Downes.
Hazleton, David A. Harman.
Homestead, James M. Norris.
Huntingdon, E. R. Barclay.
Indiana, James F. Chapman (principal).
Jeannette, Theo. B. Shank.
Jersey Shore, H. H. Weber.
Johnsonburg, G. B. Gerberich (supervising principal).
Johnstown, James N. Muir.
Kane, T. E. Lytle.
Kingston, George Evans (principal).
Kittanning, C. E. Hankey.
Knoxville, Milo H. Miller (principal).
Lancaster, R. K. Buehrle.
Lansford, Elmer E. Kuntz.
Latrobe, Arthur C. Klack.
Lebanon, R. T. Adams.
Lehighton, F. A. Ebert.
Lewistown, W. F. Kennedy (supervising principal).
Lockhaven, John A. Robb.
Luzerne, Theron G. Osborne.
McKeesport, J. Burdette Richey.
McKees Rocks, F. H. Powers (principal).
Mahanoy City, William N. Ehrhart.
Mauchchunk, E. W. Romberger (supervising principal).
Meadville, Ulysses G. Smith.
Middletown, H. J. Wickey.
Millvale, J. C. R. Johnston (principal).
Milton, W. A. Wilson.
Minersville, H. H. Spayd (supervising principal).
Monessen, Robert W. Hilmelick.
Monongahela City, C. H. Wolford (principal).

PENNSYLVANIA—Continued.

Mount Carmel, Samuel Halsey Dean.
Mount Pleasant, S. Grant Miller (principal).
Nanticoke, John William Griffith.
New Brighton, Clyde C. Green.
Newcastle, T. A. Kimes.
New Kensington, A. D. Horton (principal).
Norristown, A. S. Martin.
Oil City, C. A. Babcock.
Olyphant, M. W. Cummings.
Philadelphia, Martin G. Brumbaugh.
Phoenixville, Robert E. Laramy.
Pittsburg, Samuel Andrews.
Pittston, Robert Shiel (supervising principal).
Plymouth, E. H. Scott.
Pottstown, Wm. W. Rupert.
Pottsville, S. A. Thurston.
Punxsutawney, G. F. W. Mark.
Rankin, M. E. Thompson.
Reading, Charles S. Foos.
Renovo, Oden C. Gortner (supervising principal).
Ridgeway, W. W. Peirce.
Rochester, O. C. Lester.
St. Clair, Thomas G. Jones.
St. Marys, J. J. Lynch (supervising principal).
Sayre, I. F. Stetler (supervising principal).
Scottdale, Edgar Reed (supervising principal).
Scranton, Geo. W. Phillips.
Sewickley, F. E. Fickinger.
Shamokin, Jos. Howerth.
Sharon, S. H. Hadley.
Sharpsburg, C. C. Kelso (supervising principal).
Shenandoah, J. W. Cooper.
Sheridan,
Slatington, J. W. Snyder.
South Bethlehem, Owen R. Wilt.
South Sharon, C. G. Canon.
Steelton, L. E. McGinnes.
Sunbury, Ira Shipman.
Tamaqua, Robert F. Ditchburn.
Tarentum, A. D. Endsley (principal).
Taylor, M. J. Lloyd.
Titusville, Henry Pease.
Towanda, S. A. Thurston.
Turtle Creek, David R. Sumstine.
Tyrone, I. C. M. Ellenberger.
Uniontown, H. F. Brooks.
Warren, W. L. McGowan.
Washington, William Krichbaum.
Waynesboro, J. Hassler Reber.
Westchester, Addison L. Jones.
West Pittston, L. P. Bierly (principal).
Wilkesbarre, James M. Coughlin.
Wilkinsburg, James L. Allison.
Williamsport, Charles Lose.
Wilmerding, W. G. Gans (principal).
Windber, D. M. Hetrick.
Winton, John J. Judge.
York, Atreus Wanner.

RHODE ISLAND.

Bristol, John Post Reynolds.
Burrillville, Leroy G. Staples (post-office, Pascoag).
Central Falls, Wendell A. Mowry.
Coventry, John Matteson (post-office, Anthony).
Cranston, Valentine Almy (post-office, Auburn).
Cumberland, C. C. Richardson.
East Providence, Herbert B. Horton.
Johnston, William H. Starr (post-office, Thornton).
Lincoln, Emerson L. Adams.
Newport, Herbert Warren Lull.
North Kingstown, F. D. Blake (post-office, Wickford).
North Providence,
Pawtucket, Frank O. Draper.
Providence, Walter H. Small.
South Kingstown, B. E. Helme (post-office, Kingston).
Warren, G. L. Church.
Warwick, Elwood T. Wyman.
Westerly, W. H. Holmes, jr.
Woonsocket, Frank E. McFee.

SOUTH CAROLINA.

Abbeville, Leonard W. Dick.
Aiken, W. L. Brooker.
Anderson, Thomas C. Walton.
Beaufort, Lueco Gunter.
Charleston, Henry P. Archer.
Chester, W. H. McNairy.
Columbia, E. S. Dreher.
Florence, J. L. Mann.
Gaffney, W. C. McArthur.
Georgetown, O. L. Shewmake.
Greenville, E. L. Hughes.
Greenwood, Edward C. Coker.
Laurens, Nathaniel M. Salley.
Newberry, W. A. Stuckey.
Orangeburg, A. J. Thackston.
Rock Hill, J. C. Cork.
Spartanburg, Frank Evans.
Sumter, S. H. Edmunds.
Union, Davis Jeffries.

SOUTH DAKOTA.

Aberdeen, W. L. Cochrane.
Deadwood, Alexander Strachan.
Lead, Anson H. Bigelow.
Mitchell, F. H. Hoff.
Sioux Falls, H. A. Ustrud.
Watertown, A. H. Barnard.
Yankton, R. C. Shellenbarger.

TENNESSEE.

Bristol, Richard Henry Watkins.
Chattanooga, Sidney G. Gilbreath.
Clarksville, P. L. Harned.
Cleveland, D. C. Arnold.

TENNESSEE—Continued.

Columbia, W. E. Bostick (principal) and J. H. Kelly (principal).
Dyersburg, Ralph E. Rice.
Harriman, J. V. Rymer.
Jackson, G. R. McGee.
Johnson City, J. R. Lowry.
Knoxville, Albert Ruth.
Memphis, George W. Gordon.
Murfreesboro, J. W. W. Daniels.
Nashville, H. C. Weber.

TEXAS.

Austin, A. N. McCallum.
Beaumont, H. F. Triplett.
Belton, James B. Hubbard.
Bonham, I. W. Evans.
Brenham, Edward W. Tarrant.
Brownsville, Thomas P. Barbour (principal).
Brownwood, George H. Carpenter.
Bryan,
Cleburne, V. M. Fulton.
Corpus Christi, Charles W. Crossley.
Corsicana, J. W. Cantwell.
Dallas, J. L. Long.
Denison, F. B. Hughes.
Denton, J. S. Carlisle.
El Paso, G. P. Putnam.
Ennis, W. E. Edelen.
Fort Worth, W. D. Williams.
Gainesville, E. F. Comegys.
Galveston, John W. Hopkins.
Gonzales, Thomas H. Lewis.
Greenville, George A. Newton.
Hillsboro, W. D. Butler.
Houston, P. W. Horn.
Laredo, L. J. Christen.
McKinney, J. H. Hill.
Marshall, W. H. Attebery.
Navasota, W. B. Bizzell.
Oak Cliff,
Orange, S. B. Foster.
Palestine, Walker King.
Paris, J. G. Wooten.
San Antonio, L. E. Wolfe.
Sherman, A. L. Peterman.
Taylor, W. M. Williams.
Temple, James E. Binkley.
Terrell, S. M. N. Marrs.
Texarkana, E. E. Bramlette.
Tyler, J. L. Henderson.
Victoria, Arthur Lefevre.
Waco, J. C. Lattimore.
Waxahatchie, Walter Acker.
Weatherford, T. W. Stanley.

UTAH.

Logan, Ariel F. Cardon.
Ogden, William Allison.
Park City, M. W. Laning.
Provo, William S. Rawlings.
Salt Lake City, D. H. Christensen.

VERMONT.

Barre, O. D. Mathewson.
Bellows Falls, B. E. Merriam.
Bennington, Albert W. Varney.
Brattleboro, Miss Marguerite Tucker (supervisor).
Burlington, Henry O. Wheeler.
Montpelier, F. J. Brownscombe.
Rutland, David B. Locke.
St. Albans, F. J. Sagendorph.
St. Johnsbury, Clarence H. Dempsey.

VIRGINIA.

Alexandria, Kosciusko Kemper.
Bristol, S. R. McChesney.
Charlottesville, James W. Lane.
Danville, William Holmes Davis.
Fredericksburg, Benjamin P. Willis.
Harrisonburg,
Lynchburg, E. C. Glass.
Manchester, David L. Pulliam.
Newport News, W. C. Morton.
Norfolk, Richard A. Doble.
Petersburg, D. M. Brown.
Portsmouth, Joseph H. Saunders.
Radford, L. W. Irwin.
Richmond, William F. Fox.
Roanoke, Bushrod Rust.
Staunton, Francis H. Smith, jr.
Suffolk, Lee Britt (county superintendent).
Winchester, Maurice M. Lynch.

WASHINGTON.

Aberdeen, H. M. Cook.
Ballard, J. C. Dickson.
Bellingham, W. J. Hughes.
Everett, D. A. Thornburg.
North Yakima, David Craig Reed.
Olympia, W. W. Montgomery.
Seattle, Frank B. Cooper.
Spokane, J. A. Tormey.
Tacoma, A. H. Yoder.
Vancouver, C. W. Shumway.
Walla Walla, O. S. Jones.

WEST VIRGINIA.

Benwood, George E. Hubbs.
Bluefield, C. A. Fulwider.
Charleston, George S. Laidley.
Clarksburg, F. L. Burdette.
Fairmont, Joseph Rosier.
Grafton, W. R. Gorby.
Hinton, I. B. Bush.
Huntington, W. M. Foulk.
Martinsburg, George W. Brindle.
Moundsville, W. M. Henderson.
Parkersburg, J. W. Swartz.
Wheeling, H. B. Work.

WISCONSIN.

Antigo, W. N. Hickok.
Appleton, Carrie E. Morgan.
Ashland, J. T. Hooper.

WISCONSIN—Continued.

Baraboo, G. W. Gehrand.
Beaverdam, Homer B. Hubbell.
Beloit, Franklin E. Converse.
Berlin, E. T. O'Brien.
Chippewa Falls, E. D. Martin.
Depere:
East Side, J. W. Steenis.
West Side, J. V. Brennan.
Eau Claire, W. H. Schulz.
Fond du Lac, William Wilson.
Grand Rapids, H. S. Yonker.
Greenbay, A. W. Burton.
Janesville, H. C. Buell.
Kaukauna, L. E. Sargent.
Kenosha, P. J. Zimmers.
La Crosse, John P. Bird.
Madison, R. B. Dudgeon.
Manitowoc, Walter E. Larson (county superintendent).
Marinette, G. H. Landgraf.
Marshfield, Durant C. Giles.
Menasha, John Callahan.
Menomonie, L. D. Harvey.
Merrill, G. J. Roberts.
Milwaukee, C. G. Pearse.
Monroe, G. W. Swartz.

WISCONSIN—Continued.

Neenah, E. M. Beeman.
Oconto, G. F. Loomis.
Oshkosh, M. N. McIver.
Platteville, O. E. Gray.
Portage, W. G. Clough (principal).
Port Washington,
Racine, Burton E. Nelson.
Rhinelander, F. A. Lowell.
Sheboygan, H. F. Leverenz.
South Milwaukee, Paul Bergen.
Stevens Point, John N. Davis.
Stoughton, A. W. Weber.
Sturgeon Bay, Charles G. Stangel.
Superior, W. E. Maddock.
Two Rivers,
Washburn, S. A. Oscar.
Watertown, W. P. Roseman.
Waukesha, A. W. Chamberlin.
Wausau, S. B. Tobey.

WYOMING.

Cheyenne, S. S. Stockwell.
Laramie, Frank W. Lee.
Rock Springs, S. M. Abbott.
Sheridan, C. R. Atkinson.

III.—College Presidents.

1.—*Colleges for men and coeducational colleges of liberal arts.*

Name of president.	University or college.	Address.
A. P. Montague, LL. D	Howard College	Birmingham, Ala.
Rev. S. M. Hosmer, D. D	Southern University	Greensboro, Ala.
Rev. Bernard Menges, O. S. B	St. Bernard College	St. Bernard, Ala.
Rev. William Tyrrell, S. J	Spring Hill College	Springhill, Ala.
John W. Abercrombie, LL. D	University of Alabama	University, Ala.
Kendric C. Babcock, Ph. D	University of Arizona	Tucson, Ariz.
John M. Williams, A. B., dean.	Henderson College	Arkadelphia, Ark.
John W. Conger, LL. D	Ouachita College	Do.
Eugene R. Long, Ph. D	Arkansas College	Batesville, Ark.
J. Thompson Baker, Ph. M	Arkansas Cumberland College	Clarksville, Ark.
Rev. S. Anderson, A. B	Hendrix College	Conway, Ark.
John N. Tillman, LL. B	University of Arkansas	Fayetteville, Ark.
Rev. J. M. Cox, D. D	Philander Smith College	Little Rock, Ark.
B. I. Wheeler, LL. D	University of California	Berkeley, Cal.
Rev. George A. Gates, LL. D	Pomona College	Claremont, Cal.
John Willis Baer, LL. D	Occidental College	Los Angeles, Cal.
Rev. J. S. Glass, C. M., D. D	St. Vincent's College	Do.
Rev. George F. Bovard, D. D	University of Southern California	Do.
Rev. T. G. Brownson, D. D	California College	Oakland, Cal.
Rev. Bro. Vellesian, F. S. C	St. Mary's College	Do.
Walter A. Edwards, LL. D	Throop Polytechnic Institute	Pasadena, Cal.
Rev. John P. Frieden, S. J	St. Ignatius College	San Francisco, Cal.
M. S. Cross, D. D., acting	University of the Pacific	San Jose, Cal.
Rev. Robert E. Kenna, S. J	Santa Clara College	Santa Clara, Cal.
D. S. Jordan, LL. D	Leland Stanford Junior University.	Stanford University, Cal.
James H. Baker, LL. D	University of Colorado	Boulder, Colo.
Rev. W. F. Slocum, LL. D	Colorado College	Colorado Springs, Colo.
Rev. A. J. Schuler, S. J	College of the Sacred Heart	Denver, Colo.
Rev. Henry A. Buchtel, LL. D., chancellor.	University of Denver	University Park, Colo.
Rev. Flavel S. Luther, LL. D	Trinity College	Hartford, Conn.
Rev. B. P. Raymond, LL. D	Wesleyan University	Middletown, Conn.
Arthur T. Hadley, LL. D	Yale University	New Haven, Conn.
Rev. W. C. Jason, A. M	State College for Colored Students.	Dover, Del.
Geo. A. Harter, Ph. D	Delaware College	Newark, Del.

III.—College Presidents—Continued.

1.—*Colleges for men and coeducational colleges of liberal arts*—Continued.

Name of president.	University or college.	Address.
Rev. Dennis J. O'Connell, S. T. D., rector.	Catholic University of America	Washington, D. C.
E. M. Gallaudet, LL. D.	Gallaudet College	Do.
Rev. David H. Buel, S. J.	Georgetown University	Do.
Charles W. Needham, LL. D.	George Washington University	Do.
Rev. Edward X. Fink, S. J.	Gonzaga College	Do.
Rev. W. P. Thirkield, D. D.	Howard University	Do.
Rev. Brother Germanus, F. S. C.	St. John's College	Do.
Lincoln Hulley, Ph. D.	John B. Stetson University	Deland, Fla.
Andrew Sledd, LL. D.	University of the State of Florida	Gainesville, Fla.
Rev. Charles H. Mohr, Ph. D.	St. Leo College	St. Leo, Fla.
Rev. Wm. F. Blackman, Ph. D.	Rollins College	Winterpark, Fla.
David C. Barrow, C. and M. E. Chancellor	University of Georgia	Athens, Ga.
Rev. George Sale, A. M.	Atlanta Baptist College	Atlanta, Ga.
Rev. Horace Bumstead, D. D.	Atlanta University	Do.
Rev. J. S. Flipper, D. D.	Morris Brown College	Do.
W. Claude Williams, A. B.	Bowdon College	Bowdon, Ga.
G. R. Glenn, LL. D.	North Georgia Agricultural College.	Dahlonega, Ga.
Rev. S. Y. Jameson, D. D.	Mercer University	Macon, Ga.
Rev. J. E. Dickey, D. D.	Emory College	Oxford, Ga.
W. H. Crogman, Litt. D.	Clark University	South Atlanta, Ga.
William F. Quillian, jr., A. B.	Nannie Lou Warthen Institute	Wrightsville, Ga.
Rev. Joseph A. Sharp, A. B.	Young Harris College	Young Harris, Ga.
James A. MacLean, LL. D.	University of Idaho	Moscow, Idaho.
Rev. Harry B. Gough, A. B.	Hedding College	Abingdon, Ill.
Rev. Francis G. Barnes, D. D.	Illinois Wesleyan University	Bloomington, Ill.
Rev. M. J. Marsile, C. S. V.	St. Viateur's College	Bourbonnais, Ill.
Thomas W. Lingle, Ph. D.	Blackburn College	Carlinville, Ill.
Rev. Fred L. Sigmund, D. D.	Carthage College	Carthage, Ill.
Rev. Henry J. Dumbach, S. J.	St. Ignatius College	Chicago, Ill.
Rev. John Kosinski, C. R.	St. Stanislaus College	Do.
Harry P. Judson, LL. D., acting	University of Chicago	Do.
A. R. Taylor, Ph. D.	James Millikin University	Decatur, Ill.
Rev. Daniel Irion	Evangelical Proseminary	Elmhurst, Ill.
Robert E. Hieronymus, A. M.	Eureka College	Eureka, Ill.
Abram W. Harris, LL. D.	Northwestern University	Evanston, Ill.
Rev. J. A. Leavitt, D. D.	Ewing College	Ewing, Ill.
Rev. Thomas McClelland, D. D.	Knox College	Galesburg, Ill.
Rev. Lewis B. Fisher, D. D.	Lombard College	Do.
Rev. A. L. Whitcomb, M. S.	Greenville College	Greenville, Ill.
C. H. Rammelkamp, Ph. D.	Illinois College	Jacksonville, Ill.
Rev. Richard D. Harlan, LL. D.	Lake Forest College	Lake Forest, Ill.
M. H. Chamberlin, LL. D.	McKendree College	Lebanon, Ill.
J. H. McMurray, A. M.	Lincoln College	Lincoln, Ill.
Rev. Thos. H. McMichael, D. D.	Monmouth College	Monmouth, Ill.
Rev. H. J. Kiekhoefer, Ph. D.	Northwestern College	Naperville, Ill.
Rev. Daniel J. Kalb, O. S. B., rector	St. Bede College	Peru, Ill.
Rev. Anselm Mueller, O. S. F.	St. Francis Solanus College	Quincy, Ill.
Gustav A. Andreen, Ph. D.	Augustana College	Rock Island, Ill.
Rev. Hugoline Storff, O. F. M., rector.	St. Joseph's College	Teutopolis, Ill.
J. D. S. Riggs, L. H. D.	Shurtleff College	Upper Alton, Ill.
Edmund J. James, LL. D.	University of Illinois	Urbana, Ill.
W. R. Shuey, A. M.	Westfield College	Westfield, Ill.
Rev. C. A. Blanchard, D. D.	Wheaton College	Wheaton, Ill.
William L. Bryan, LL. D.	Indiana University	Bloomington, Ind.
Rev. Augustine Seifert, C. PP. S.	St. Joseph's College	Collegeville, Ind.
Rev. Wm. P. Kane, LL. D.	Wabash College	Crawfordsville, Ind.
Rev. Martin Luecke.	Concordia College	Fort Wayne, Ind.
Elmer B. Bryan, A. B.	Franklin College	Franklin, Ind.
Rev. E. H. Hughes, S. T. D.	De Pauw University	Greencastle, Ind.
Rev. D. W. Fisher, LL. D.	Hanover College	Hanover, Ind.
W. E. Garrison, Ph. D.	Butler College	Indianapolis, Ind.
Rev. C. J. Jones, D. D.	Union Christian College	Merom, Ind.
Rev. Frank C. English, D. D.	Moores Hill College	Moores Hill, Ind.
Rev. John W. Cavanaugh, C. S. C.	University of Notre Dame	Notre Dame, Ind.
Robert L. Kelly, Ph. M.	Earlham College	Richmond, Ind.
Rev. A. Schmitt, O. S. B.	St. Meinrad College	St. Meinrad, Ind.
Rev. C. W. Winchester, D. D.	Taylor University	Upland, Ind.
Rev. William C. Farmer, A. M.	Indian University	Bacone, Ind. T.
Rev. A. Grant Evans.	Henry Kendall College	Muskogee, Ind. T.
W. Wilberforce Smith, LL. D.	Coe College	Cedar Rapids, Iowa.

III.—College Presidents—Continued.

1.—*Colleges for men and coeducational colleges of liberal arts*—Continued.

Name of president.	University or college.	Address.
Rev. Frank E. Hirsch, D. D	Charles City College	Charles City, Iowa.
O. Kraushaar	Wartburg College	Clinton, Iowa.
Rev. R. T. Campbell, D. D.	Amity College	College Springs, Iowa.
Rev. C. K. Preus	Luther College	Decorah, Iowa.
Rev. Loran D. Osborn, Ph. D	Des Moines College	Des Moines, Iowa.
Hiram M. Bell, LL. D	Drake University	Do.
Rev. Daniel M. Gorman	St. Joseph's College	Dubuque, Iowa.
Rev. W. E. Parsons, D. D	Parsons College	Fairfield, Iowa.
Rev. Wm. A. Shanklin, LL. D.	Upper Iowa University	Fayette, Iowa.
John H. T. Main, Ph. D	Iowa College	Grinnell, Iowa.
Rev. F. W. Grossman, D. D.	Lenox College	Hopkinton, Iowa.
Charles E. Shelton, LL. D.	Simpson College	Indianola, Iowa.
Geo. E. MacLean, LL. D.	State University of Iowa	Iowa City, Iowa.
R. M. Stewart, A. B.	Graceland College	Lamoni, Iowa.
Carlyle Summerbell, A. M.	Palmer College	Legrand, Iowa.
Rev. F. S. Havighorst, D. D.	German College	Mount Pleasant, Iowa.
Rev. John W. Hancher, S. T. D	Iowa Wesleyan University	Do.
Rev. Wm. F. King, LL. D	Cornell College	Mount Vernon, Iowa.
A. Rosenberger, A. B	Penn College	Oskaloosa, Iowa.
Rev. L. A. Garrison, D. D.	Central University of Iowa	Pella, Iowa.
Rev. W. S. Lewis, D. D	Morningside College	Sioux City, Iowa.
Rev. E. E. Reed, D. D	Buena Vista College	Storm Lake, Iowa.
George N. Ellis, A. M.	Tabor College	Tabor, Iowa.
Rev. C. J. Kephart, D. D.	Leander Clark College	Toledo, Iowa.
Rev. Millard F. Troxell, D. D	Midland College	Atchison, Kans.
Rev. J. Wolf, O. S. B., D. D	St. Benedict's College	Do.
Rev. L. H. Murlin, D. D.	Baker University	Baldwin, Kans.
W. D. Ward, Ph. D., acting	College of Emporia	Emporia, Kans.
George E. Knepper	Highland University	Highland, Kans.
Rev. T. D. Crites	Campbell College	Holton, Kans.
Rev. D. S. Stephens, D. D., chancellor.	Kansas City University	Kansas City, Kans.
Frank Strong, Ph. D	University of Kansas	Lawrence, Kans.
O. B. Whitaker	Kansas Christian College	Lincoln, Kans.
Rev. Ernst F. Pihlblad, A. M.	Bethany College	Lindsborg, Kans.
Rev. R. A. Schwegler, A. B., acting.	Ottawa University	Ottawa, Kans.
Rev. James McCabe, S. J.	St. Mary's College	St. Marys, Kans.
Thomas W. Roach, A. M.	Kansas Wesleyan University	Salina, Kans.
Rev. F. M. Spencer, D. D	Cooper Memorial College	Sterling, Kans.
Rev. Norman Plass, D. D.	Washburn College	Topeka, Kans.
Rev. N. J. Morrison, LL. D.	Fairmount College	Wichita, Kans.
Edmund Stanley, A. M.	Friends University	Do.
Rev. A. W. Meyer	St. John's Lutheran College	Winfield, Kans.
Frank E. Mossman, A. M.	Southwest Kansas College	Do.
Rev. J. W. Easley, D. D	Union College	Barbourville, Ky.
Rev. Wm. G. Frost, Ph. D.	Berea College	Berea, Ky.
Frederick W. Hinitt, Ph. D.	Central University of Kentucky	Danville, Ky.
Rev. J. J. Taylor, LL. D.	Georgetown College	Georgetown, Ky.
Rev. Geo. J. Burnett, A. M.	Liberty College	Glasgow, Ky.
Rev. Burris A. Jenkins, D. D.	Kentucky University	Lexington, Ky.
J. K. Patterson, LL. D.	State College of Kentucky	Lexington, Ky.
William H. Harrison, A. M.	Bethel College	Russellville, Ky.
Rev. Michael Jaglowicz, C. R.	St. Mary's College	St. Marys, Ky.
Rev. John L. Weber, Litt. D.	Kentucky Wesleyan College	Winchester, Ky.
Thomas D. Boyd, LL. D.	Louisiana State University	Baton Rouge, La.
Rev. R. H. Smith, S. M.	Jefferson College	Convent, La.
Rev. C. C. Miller	Centenary College of Louisiana	Jackson, La.
Rev. Henry S. Marlog, S. J.	College of the Immaculate Conception	New Orleans, La.
R. W. Perkins, Ph. D.	Leland University	Do.
Frederic H. Knight, Ph. D.	New Orleans University	Do.
E. B. Craighead, LL. D.	Tulane University of Louisiana	Do.
Rev. Wm. D. Hyde, LL. D.	Bowdoin College	Brunswick, Me.
Rev. G. C. Chase, LL. D.	Bates College	Lewiston, Me.
George E. Fellows, LL. D.	University of Maine	Orono, Me.
Rev. Charles L. White, D. D.	Colby College	Waterville, Me.
Thomas Fell, LL. D.	St. John's College	Annapolis, Md.
Ira Remsen, LL. D.	Johns Hopkins University	Baltimore, Md.
Rev. John F. Quirk, S. J.	Loyola College	Do.
Rev. John O. Spencer, Ph. D.	Morgan College	Do.
James W. Cain, LL. D.	Washington College	Chestertown, Md.
Rev. Brother Abraham	Rock Hill College	Ellicott City, Md.
Rev. F. X. McKenny, S. S	St. Charles College	Do.
Rev. D. J. Flynn, LL. D.	Mount St. Mary's College	Emmitsburg, Md.
Rev. James Fraser, Ph. D.	New Windsor College	New Windsor, Md.
Rev. Thomas H. Lewis, D. D	Western Maryland College	Westminster, Md.
Rev. George Harris, LL. D.	Amherst College	Amherst, Mass.
Rev. William Gannon, S. J.	Boston College	Boston, Mass.

III.—College Presidents—Continued.

1.—*Colleges for men and coeducational colleges of liberal arts*—Continued.

Name of president.	University or college.	Address.
Rev. W. E. Huntington, LL. D.	Boston University	Boston, Mass.
Charles W. Eliot, LL. D.	Harvard University	Cambridge, Mass.
Rev. Samuel H. Lee, A. M.	American International College	Springfield, Mass.
Rev. F. W. Hamilton, D. D.	Tufts College	Tufts College, Mass.
Rev. Henry Hopkins, LL. D.	Williams College	Williamstown, Mass.
G. Stanley Hall, LL. D.	Clark University	Worcester, Mass.
Carroll D. Wright, LL. D.	Collegiate Department of Clark University.	Do.
Rev. Joseph F. Hanselman, S. J.	College of the Holy Cross	Do.
Rev. B. W. Anthony, D. D.	Adrian College	Adrian, Mich.
Samuel Dickie, LL. D.	Albion College	Albion, Mich.
Rev. August F. Bruske, D. D.	Alma College	Alma, Mich.
James B. Angell, LL. D.	University of Michigan	Ann Arbor, Mich.
Rev. Louis J. Kellinger, S. J.	Detroit College	Detroit, Mich.
Joseph W. Mauck, LL. D.	Hillsdale College	Hillsdale, Mich.
Gerrit J. Kollen, LL. D.	Hope College	Holland, Mich.
A. G. Slocum, LL. D.	Kalamazoo College	Kalamazoo, Mich.
E. G. Lancaster, Ph. D.	Olivet College	Olivet, Mich.
Rev. P. Engel, O. S. B., Ph. D.	St. John's University	Collegeville, Minn.
Georg Sverdrup	Augsburg Seminary	Minneapolis, Minn.
Cyrus Northrop, LL. D.	University of Minnesota	Do.
Rev. Wm. H. Sallmon, D. D.	Carleton College	Northfield, Minn.
Rev. John N. Kildahl	St. Olaf College	Do.
Rev. Geo. H. Bridgman, LL. D.	Hamline University	St. Paul, Minn.
James Wallace, Ph. D.	Macalester College	Do.
Rev. P. A. Mattson, B. D.	Gustavus Adolphus College	St. Peter, Minn.
Rev. E. W. Van Aken, A. M., B. D.	Parker College	Winnebago, Minn.
Rev. Wm. T. Lowrey, D. D.	Mississippi College	Clinton, Miss.
Rev. Wm. W. Foster, jr., D. D.	Rust University	Holly Springs, Miss.
Rev. W. B. Murrah, LL. D.	Millsaps College	Jackson, Miss.
Alfred Hume, vice-chancellor	University of Mississippi	University, Miss.
Rev. Joseph W. Tucker, A. B.	Southwest Baptist College	Bolivar, Mo.
W. M. Jones, Ph. D.	Pike College	Bowling Green, Mo.
Rev. Walter D. Agnew, A. B.	Missouri Wesleyan College	Cameron, Mo.
Carl Johann, LL. D.	Christian University	Canton, Mo.
Charles C. Peters, A. B.	Clarksburg College	Clarksburg, Mo.
Richard H. Jesse, LL. D.	University of Missouri	Columbia, Mo.
Rev. James C. Morris, D. D.	Central College	Fayette, Mo.
Rev. D. R. Kerr, Ph. D.	Westminster College	Fulton, Mo.
Hon. U. S. Hall, A. B.	Pritchett College	Glasgow, Mo.
Rev. John W. Crouch, D. D.	Lagrange College	Lagrange, Mo.
Rev. J. P. Greene, LL. D.	William Jewell College	Liberty, Mo.
Rev. Wm. H. Black, LL. D.	Missouri Valley College	Marshall, Mo.
W. W. Thomas	Morrisville College	Morrisville, Mo.
L. M. McAfee, LL. D.	Park College	Parkville, Mo.
Rev. Brother Justin	Christian Brothers College	St. Louis, Mo.
Rev. W. B. Rogers, S. J.	St. Louis University	Do.
W. S. Chaplin, LL. D., chancellor	Washington University	Do.
Rev. J. Edward Kirbye, D. D.	Drury College	Springfield, Mo.
Rev. J. A. Thompson, D. D.	Tarkio College	Tarkio, Mo.
Rev. Geo. B. Addicks, D. D.	Central Wesleyan College	Warrenton, Mo.
Oscar J. Craig, Ph. D.	University of Montana	Missoula, Mont.
Rev. Guy W. Wadsworth, D. D.	Bellevue College	Bellevue, Nebr.
W. P. Aylsworth, LL. D.	Cotner University	Bethany, Nebr.
C. C. Lewis, B. S.	Union College	College View, Nebr.
Rev. David B. Perry, D. D.	Doane College	Crete, Nebr.
Rev. Geo. Sutherland, D. D.	Grand Island College	Grand Island, Nebr.
Rev. E. Van Dyke Wight, A. M.	Hastings College	Hastings, Nebr.
Rev. E. B. Andrews, LL. D., chancellor	University of Nebraska	Lincoln, Nebr.
Rev. M. P. Dowling, S. J.	Creighton University	Omaha, Nebr.
Rev. D. W. C. Huntington, LL. D., chancellor	Nebraska Wesleyan University	University Place, Nebr.
Rev. Wm. E. Schell, D. D.	York College	York, Nebr.
Rev. J. E. Stubbs, LL. D.	State University of Nevada	Reno, Nev.
Rev. W. J. Tucker, LL. D.	Dartmouth College	Hanover, N. H.
Rev. Abbot Hilary, O. S. B., D. D.	St. Anselm's College	Manchester, N. H.
Rev. J. W. Fox, S. J.	St. Peter's College	Jersey City, N. J.
Rev. G. Rien, O. S. B., director.	St. Benedict's College	Newark, N. J.
Rev. Wm. H. S. Demarest, D. D.	Rutgers College	New Brunswick, N. J.
Woodrow Wilson, LL. D.	Princeton University	Princeton, N. J.
Rev. John A. Stafford, S. T. L.	Seton Hall College	South Orange, N. J.
William G. Tight, Ph. D.	University of New Mexico	Albuquerque, N. Mex.

III.—College Presidents—Continued.

1.—Colleges for men and coeducational colleges of the first rank—Continued.

Name of president.	University or college.	Address.
Rev. B. C. Davis, Ph. D.	Alfred University	Alfred, N. Y.
Rev. Joseph F. Butler, O. F. M.	St. Bonaventure's College	Allegany, N. Y.
Rev. Thomas R. Harris, D. D.	St. Stephen's College	Annandale, N. Y.
C. H. Levermore, Ph. D.	Adelphi College	Brooklyn, N. Y.
F. W. Atkinson, Ph. D.	Polytechnic Institute of Brooklyn	Do.
Brother Linus, C. S. F.	St. Francis College	Do.
Rev. Patrick McHale, C. M.	St. John's College	Do.
Rev. Augustine A. Miller, S. J.	Canisius College	Buffalo, N. Y.
Rev. Aaron Gunnison, LL. D.	St. Lawrence University	Canton, N. Y.
Rev. M. W. Stryker, LL. D.	Hamilton College	Clinton, N. Y.
Rev. I. C. Sharpless, LL. D.	Hobart College	Geneva, N. Y.
Rev. Geo. E. Merrill, LL. D.	Colgate University	Hamilton, N. Y.
J. G. Schurman, LL. D.	Cornell University	Ithaca, N. Y.
Rev. D. W. Hearn, S. J.	College of St. Francis Xavier	New York, N. Y.
John H. Finley, LL. D.	College of the City of New York	Do.
Nicholas M. Butler, LL. D.	Columbia University	Do.
Rev. Brother Edward, F. S. C.	Manhattan College	Do.
Rev. Jerome Dougherty, S. J.	St. John's College	Do.
Rev. H. M. MacCracken, LL. D., chancellor.	New York University	Do.
Rev. W. F. Likly, C. M.	Niagara University	Niagara University, N. Y.
Rev. Rush Rhees, LL. D.	University of Rochester	Rochester, N. Y.
Rev. A. V. V. Raymond, LL. D.	Union College	Schenectady, N. Y.
Rev. J. R. Day, LL. D., chancellor.	Syracuse University	Syracuse, N. Y.
Rev. Leo Haid, D. D., O. S. B.	St. Mary's College	Belmont, N. C.
F. P. Venable, LL. D.	University of North Carolina	Chapel Hill, N. C.
Rev. D. J. Sanders, D. D.	Biddle University	Charlotte, N. C.
Henry L. Smith, Ph. D.	Davidson College	Davidson, N. C.
Rev. John C. Kilgo, D. D.	Trinity College	Durham, N. C.
Emmett L. Moffitt, A. M.	Elon College	Elon College, N. C.
L. London Hobbs, A. M.	Guilford College	Guilford College, N. C.
Rev. R. L. Fritz, A. M.	Lenoir College	Hickory, N. C.
Rev. George A. Snyder, A. M.	Catawba College	Newton, N. C.
Chas. F. Meserve, LL. D.	Shaw University	Raleigh, N. C.
Rev. William H. Goler, LL. D.	Livingstone College	Salisbury, N. C.
Wm. L. Poteat, LL. D.	Wake Forest College	Wake Forest, N. C.
Rev. L. B. Abernethy	Weaverville College	Weaverville, N. C.
P. O. Knowlton, Ph. D., chairman.	Fargo College	Fargo, N. Dak.
Rev. E. P. Robertson, D. D.	Wesley College	Grand Forks, N. Dak.
W. Merrifield, A. M.	University of North Dakota	University, N. Dak.
Rev. A. B. Church, LL. D.	Buchtel College	Akron, Ohio.
Rev. Albert B. Riker, D. D.	Mount Union College	Alliance, Ohio.
Alston Ellis, LL. D.	Ohio University	Athens, Ohio.
Rev. Geo. B. Rogers, Ph. D., chancellor.	Baldwin University	Berea, Ohio.
Rev. C. Riemenschneider, Ph. D.	German Wallace College	Do.
Rev. David McKinney, D. D.	Cedarville College	Cedarville, Ohio.
Rev. Albert A. Dierckes, S. J.	St. Xavier College	Cincinnati, Ohio.
Chas. W. Dabney, LL. D.	University of Cincinnati	Do.
Rev. John I. Zahm, S. J.	St. Ignatius College	Cleveland, Ohio.
Rev. C. F. Thwing, LL. D.	Western Reserve University	Do.
Rev. L. H. Schuh, Ph. D.	Capital University	Columbus, Ohio.
Rev. W. O. Thompson, LL. D.	Ohio State University	Do.
Rev. Louis A. Tragesser, S. M.	St. Mary's Institute	Dayton, Ohio.
P. W. McReynolds, A. M.	Defiance College	Defiance, Ohio.
Rev. Herbert Welch, D. D.	Ohio Wesleyan University	Delaware, Ohio.
Rev. C. J. Brown, D. D.	Findlay College	Findlay, Ohio.
Rev. Wm. F. Peirce, L. H. D.	Kenyon College	Gambier, Ohio.
Rev. Emory W. Hunt, LL. D.	Denison University	Granville, Ohio.
C. C. Rowlison.	Hiram College	Hiram, Ohio.
Charles C. Miller, Ph. D.	Lima College	Lima, Ohio.
Rev. Alfred T. Perry, D. D.	Marietta College	Marietta, Ohio.
Rev. N. B. Kelly, D. D.	Franklin College	New Athens, Ohio.
Rev. John K. Montgomery, D. D.	Muskingum College	New Concord, Ohio.
Rev. Henry C. King, D. D.	Oberlin College	Oberlin, Ohio.
Rev. Guy P. Benton, D. D.	Miami University	Oxford, Ohio.
Rev. G. W. MacMillan, Ph. D.	Richmond College	Richmond, Ohio.
Rev. J. M. Davis, Ph. D.	Rio Grande College	Rio Grande, Ohio.
Rev. I. C. Paugh, Ph. D.	Scio College	Scio, Ohio.
Rev. Charles G. Heckert, D. D.	Wittenberg College	Springfield, Ohio.
Rev. Charles E. Miller, D. D.	Heidelberg University	Tiffin, Ohio.
Rev. L. Bookwalter, D. D.	Otterbein University	Westerville, Ohio.
Rev. J. H. Straughnan	West Lafayette College	West Lafayette, Ohio.
Rev. Joshua H. Jones, D. D.	Wilberforce University	Wilberforce, Ohio.

III.—College Presidents—Continued.

1.—*Colleges for men and coeducational colleges of liberal arts*—Continued.

Name of president.	University or college.	Address.
Rev. Albert J. Brown, D. D	Wilmington College	Wilmington, Ohio.
Rev. Louis E. Holden, LL. D	University of Wooster	Wooster, Ohio.
Stephen F. Weston, Ph. D., dean.	Antioch College	Yellowsprings, Ohio.
D. R. Boyd, Ph. D	University of Oklahoma	Norman, Okla.
H. M. Crooks, A. B	Albany College	Albany, Oreg.
Charles A. Mock, Ph. D	Dallas College	Dallas, Oreg.
Prince L. Campbell, A. B	University of Oregon	Eugene, Oreg.
Wm. N. Ferrin, LL. D	Pacific University	Forestgrove, Oreg.
Rev. Leonard W. Riley, A. B	McMinnville College	McMinnville, Oreg.
Edwin McGrew, M. S	Pacific College	Newberg, Oreg.
I. E. Caldwell, A. M	Philomath College	Philomath, Oreg.
Rev. John H. Coleman, D. D	Willamette University	Salem, Oreg.
Rev. S. B. McCormick, LL. D., chancellor.	Western University of Pennsylvania.	Allegheny, Pa.
Rev. J. A. W. Haas, D. D	Muhlenberg College	Allentown, Pa.
Rev. A. P. Funkhouser, B. S	Lebanon Valley College	Annville, Pa.
Rev. Leander Schnerr, O. S. B	St. Vincent College	Beatty, Pa.
Rev. Arthur Staples, D. D	Beaver College	Beaver, Pa.
Rev. W. P. Johnston, D. D	Geneva College	Beaverfalls, Pa.
Rev. Aug. Schultze, L. H. D	Moravian College	Bethlehem, Pa.
Rev. G. E. Reed, LL. D	Dickinson College	Carlisle, Pa.
Col. C. E. Hyatt, C. E	Pennsylvania Military College	Chester, Pa.
Rev. D. W. Ebbert, D. D	Ursinus College	Collegeville, Pa.
Rev. E. D. Warfield, LL. D	Lafayette College	Easton, Pa.
Rev. Samuel G. Hefelbower, D. D.	Pennsylvania College	Gettysburg, Pa.
Rev. I. C. Ketler, Ph. D	Grove City College	Grove City, Pa.
Isaac Sharpless, LL. D	Haverford College	Haverford, Pa.
I. H. Brumbaugh, A. M., acting.	Juniata College	Huntingdon, Pa.
Rev. J. S. Stahr, Ph. D	Franklin and Marshall College	Lancaster, Pa.
John H. Harris, LL. D	Bucknell University	Lewisburg, Pa.
Rev. John B. Rendall, D. D	Lincoln University	Lincoln University, Pa.
Rev. Wm. H. Crawford, LL. D	Allegheny College	Meadville, Pa.
Rev. James D. Woodring, D. D	Albright College	Myerstown, Pa.
Rev. Robert M. Russell, D. D	Westminster College	New Wilmington, Pa.
Rev. R. E. Thompson, S. T. D	Central High School	Philadelphia, Pa.
Brother Wolfred	La Salle College	Do.
Rev. R. H. Conwell, LL. D	Temple College	Do.
C. C. Harrison, LL. D., provost.	University of Pennsylvania	Do.
Rev. M. A. Hehir, C. S. Sp	Holy Ghost College	Pittsburg, Pa.
Rev. Charles T. Aikens, A. M	Susquehanna University	Selinsgrove, Pa.
Henry S. Drinker, LL. D	Lehigh University	South Bethlehem, Pa.
James A. Beaver	Pennsylvania State College	State College, Pa.
Joseph Swain, LL. D	Swarthmore College	Swarthmore, Pa.
Rev. L. A. Delurey, O. S. A	Villanova College	Villanova, Pa.
C. F. Ball, A. M	Volant College	Volant, Pa.
Rev. J. D. Moffat, LL. D	Washington and Jefferson College	Washington, Pa.
Jacob F. Bucher, M. S., acting	Waynesburg College	Waynesburg, Pa.
Rev. W. H. P. Faunce, LL. D	Brown University	Providence, R. I.
Harrison Randolph, LL. D	College of Charleston	Charleston, S. C.
Rev. W. G. Neville, LL. D	Presbyterian College of South Carolina.	Clinton, S. C.
Rev. Wm. D. Johnson, D. D	Allen University	Columbia, S. C.
Benjamin Sloan, LL. D	University of South Carolina	Do.
Rev. Francis Y. Pressly, LL. D.	Erskine College	Duewest, S. C.
Rev. Edward M. Poteat, D. D	Furman University	Greenville, S. C.
James A. B. Scherer, LL. D	Newberry College	Newberry, S. C.
Rev. L. M. Dunton, D. D	Claflin University	Orangeburg, S. C.
Henry N. Snyder, LL. D	Wofford College	Spartanburg, S. C.
Rev. C. H. French, D. D	Huron College	Huron, S. Dak.
Rev. Thomas Nicholson, D. D	Dakota Wesleyan University	Mitchell, S. Dak.
Rev. Herman Seil	Redfield College	Redfield, S. Dak.
Garrett Droppers, Ph. D	University of South Dakota	Vermillion, S. Dak.
Rev. H. K. Warren, LL. D	Yankton College	Yankton, S. Dak.
Rev. J. H. Race, D. D	Grant University	Athens, Tenn.
F. P. Ramsay, Ph. D	King College	Bristol, Tenn.
Rev. Neander M. Woods, D. D., chancellor.	Southwestern Presbyterian University.	Clarksville, Tenn.
Rev. P. T. Hale, LL. D	Southwestern Baptist University	Jackson, Tenn.
Rev. M. D. Jeffries, D. D	Carson and Newman College	Jefferson City, Tenn.
Rev. R. W. McGranahan, D. D	Knoxville College	Knoxville, Tenn.
Brown Ayres, LL. D	University of Tennessee	Do.
D. E. Mitchell, A. B	Cumberland University	Lebanon, Tenn.
W. E. Johnston	Bethel College	McKenzie, Tenn.
Rev. Samuel T. Wilson, D. D	Maryville College	Maryville, Tenn.

III.—College Presidents—Continued.

1.—*Colleges for men and coeducational colleges of liberal arts*—Continued.

Name of president.	College.	Address.
Brother Icarion	Christian Brothers College	Memphis, Tenn.
H. R Garrett, A. M	Milligan College	Milligan, Tenn.
Rev. James G. Merrill, D. D	Fisk University	Nashville, Tenn.
Rev. Peter B Guernsey, A. M.	Roger Williams University	Do.
James H Kirkland, LL. D., chancellor.	Vanderbilt University	Do.
Rev. John A Kumler, D D	Walden University	Do.
B. Lawton Wiggins, LL. D., vice-chancellor.	University of the South	Sewanee, Tenn.
W. N Billingsley, A. M	Burritt College	Spencer, Tenn.
Rev. L. P. Lowry, A. M	Hiwassee College	Sweetwater, Tenn.
O. C. Hulvey, A. M	Tennessee Military Institute	Do.
Rev. S A Colle, D D	Greeneville and Tusculum College	Tusculum, Tenn.
Rev. James T. Cooter, D. D	Washington College	Washington, College, Tenn
Rev John T. Boland, C S. C.	St. Edward's College	Austin, Tex.
David F. Houston, LL. D	University of Texas	Do.
J H. Grove A M	Howard Payne College	Brownwood, Tex.
Rev William Fielder, D D	Fort Worth University	Fort Worth, Tex.
Rev H A Boaz, A. M	Polytechnic College	Do
Rev D Murphy, S. J	St Mary's University	Galveston, Tex.
Robert S Hyer, LL. D., regent.	Southwestern University	Georgetown, Tex.
W I Gibson, A M	Burleson College	Greenville Tex.
Rev M W. Dogan, Ph. D	Wiley University	Marshall, Tex.
Clinton Lockhart, Ph D	Texas Christian University	North Waco, Tex.
Rev Thomas S Clyce, D. D	Austin College	Sherman, Tex.
Samuel P Brooks, LL. D	Baylor University	Waco, Tex.
Rev William J Laws, D. D	Paul Quinn College	Do
Archelaus E. Turner, Ph D	Trinity University	Waxahachie, Tex.
James H Linford, B S	Brigham Young College	Logan, Utah.
Joseph T Kingsbury, Ph. D	University of Utah	Salt Lake City, Utah.
Rev R M Stevenson	Westminster College	Do
Rev. M. H Buckham, LL. D	University of Vermont	Burlington, Vt
Ezra Brainerd, LL. D	Middlebury College	Middlebury, Vt.
Charles H. Spooner, LL. D	Norwich University	Northfield, Vt.
Robert E Blackwell, LL. D	Randolph Macon College	Ashland, Va.
W. B. Yount	Bridgewater College	Bridgewater, Va.
E. A Alderman, LL. D	University of Virginia	Charlottesville, Va.
Rev R G Waterhouse, D. D	Emory and Henry College	Emory, Va.
Rev. J. W Rosebro, D. D	Fredericksburg College	Fredericksburg, Va.
Rev J G M Allister, D. D	Hampden Sidney College	Hampden Sidney, Va.
George H Denny, LL. D	Washington and Lee University	Lexington, Va.
J. A Hopwood, A M	Virginia Christian College	Lynchburg, Va.
F W Boatwright, LL. D	Richmond College	Richmond, Va
Rev. George R Hovey, D. D	Virginia Union University	Do.
Rev John A Morehead, D D	Roanoke College	Salem, Va.
L G Tyler LL. D	College of William and Mary	Williamsburg, Va.
Rev John M. Foster, D. D	Vashon College	Burton, Wash.
Thomas F Kane, Ph D	University of Washington	Seattle, Wash.
Rev Herman J Goller, S. J	Gonzaga College	Spokane, Wash
Rev. Joseph F. Williams, D. D	University of Puget Sound	Tacoma, Wash.
Edward T. Mathes, Ph. D	Whitworth College	Do
Rev S. B. L Penrose, D. D	Whitman College	Walla Walla, Wash.
D W Shaw, A. M	Morris Harvey College	Barboursville, W. Va.
T E Cramblet, LL. D	Bethany College	Bethany, W. Va.
Marshall C Allaten, A B	Davis and Elkins College	Elkins, W. Va.
D. P. Purinton, LL. D	West Virginia University	Morgantown, W. Va.
Rev. S Plantz, Ph. D	Lawrence University	Appleton, Wis.
Rev Edward D. Eaton, LL. D.	Beloit College	Beloit, Wis.
Charles R. Van Hise, LL. D	University of Wisconsin	Madison, Wis.
Rev. Wm C Boland, D. D	Milton College	Milton, Wis.
Rev. M J F. Albrecht	Concordia College	Milwaukee, Wis.
Rev. Alexander J. Burrowes, S. J.	Marquette College	Do.
Rev H A Muehlmeier, D D	Mission House	Plymouth, Wis.
Rev Richard C Hughes, D. D	Ripon College	Ripon, Wis
Rev A F Ernst	Northwestern University	Watertown, Wis.
Rev W. O. Carrier, D. D	Carroll College	Waukesha, Wis.
Frederick M. Tisdel, Ph D	University of Wyoming	Laramie, Wyo.

III.—College Presidents—Continued.

2.—*Colleges for women.*

Name of president.	College	Address.
C. J. Owens, LL. D.	Anniston College	Anniston, Ala.
Miss Mary N. Moore	Athens Female College	Athens, Ala.
Rev. Robert G. Patrick, D. D.	Judson College	Marion, Ala.
Jno. D. Wade, A. M.	Marion Female Seminary	Do.
Rev. T. Peyton Walton	Alabama Synodical College for Women	Talladega, Ala.
Rev. B. F. Giles, A. M.	Central Female College	Tuscaloosa, Ala.
R. J. Holston, A. M.	Tuscaloosa Female College	Do.
John Massey, LL. D.	Alabama Conference Female College.	Tuskegee, Ala.
W. W. Rivers, A. M.	Central Baptist College	Conway, Ark.
Mrs. C. T. Mills	Mills College	Mills College, Cal.
Sister Mary Bernardine	College of Notre Dame	San Jose, Cal.
Sister Georgiana	Trinity College	Washington, D. C.
Mrs. M. A. Lipscomb	Lucy Cobb Institute	Athens, Ga.
Rev. Adlai J. Montrief	Southern Female (Cox) College	College Park, Ga.
Rev. Homer Bush, A. M.	Andrew Female College	Cuthbert, Ga.
Rev. Thomas L. Bryan	Dalton Female College	Dalton, Ga.
C. H. S. Jackson, LL. D.	Monroe Female College	Forsyth, Ga.
A. W. Van Hoose; H. J. Pearce	Brenau College	Gainesville, Ga.
Rufus W. Smith, A. M.	Lagrange Female College	Lagrange, Ga.
M. W. Hatton, A. M.	Southern Female College	Do.
Du Pont Guerry	Wesleyan Female College	Macon, Ga.
T. J. Simmons, A. M.	Shorter College	Rome, Ga.
Rev. Joseph R. Harker, Ph. D.	Illinois Woman's College	Jacksonville, Ill.
Rev. C. W. Leffingwell, D. D., rector.	St. Mary's School	Knoxville, Ill.
Julia H. Gulliver, Ph. D.	Rockford College	Rockford, Ill.
Rev. F. R. Millspaugh, D. D.	College of the Sisters of Bethany	Topeka, Kans.
Rev. Benj. F. Cabell, D. D.	Potter College	Bowling Green, Ky.
John C. Acheson, A. M.	Caldwell College	Danville, Ky.
Th. Smith, A. M.	Beaumont College	Harrodsburg, Ky.
Rev. Edmund Harrison, LL. D.	Bethel Female College	Hopkinsville, Ky.
Mrs. L. W. St. Clair	Hamilton Female College	Lexington, Ky.
Geo. I. Ramsey, LL. D.	Sayre Female Institute	Do.
Rev. C. C. Fisher, A. M.	Millersburg Female College	Millersburg, Ky.
H. H. Savage, A. B.	Jessamine Female Institute	Nicholasville, Ky.
J. Byron La Rue.	Owensboro Female College	Owensboro, Ky.
B. E. Atkins, A. M.	Logan Female College	Russellville, Ky.
Rev. H. H. Brownlee	Silliman Collegiate Institute	Clinton, La.
G. W. Thigpen, A. M.	Louisiana Female College	Kentchie, La.
T. S. Sligh, A. M.	Mansfield Female College	Mansfield, La.
Brandt V. B. Dixon, LL. D.	H. Sophie Newcomb Memorial College.	New Orleans, La.
W. C. Joslin.	Westbrook Seminary	Woodfords, Me.
Mary Theophila	Notre Dame of Maryland	Baltimore, Md.
Rev. John F. Goucher, LL. D.	Woman's College of Baltimore	Do.
J. H. Apple, A. M.	Woman's College	Frederick, Md.
J. E. Shaw	Kee Mar College	Hagerstown, Md.
Rev. J. H. Turner, D. D.	Maryland College for Young Ladies.	Lutherville, Md.
C. C. Bragdon, LL. D.	Lasell Seminary for Young Women	Auburndale, Mass.
Henry Lefavour, LL. D.	Simmons College	Boston, Mass.
Le Baron R. Briggs, LL. D.	Radcliffe College	Cambridge, Mass.
Rev. L. Clark Seelye, LL. D.	Smith College	Northampton, Mass.
Mary E. Woolley, Litt. D.	Mount Holyoke College	South Hadley, Mass.
Miss Caroline Hazard, LL. D.	Wellesley College	Wellesley, Mass.
B. G. Lowrey, A. M.	Blue Mountain Female College	Blue Mountain, Miss.
Rev. I. W. Cooper, D. D.	Whitworth Female College	Brookhaven, Miss.
Rev. John L. Johnson, LL. D.	Hillman College	Clinton, Miss.
Hon. A. A. Kincannon.	Industrial Institute and College	Columbus, Miss.
J. A. Sanderson, principal.	Central Mississippi Institute	French Camp, Miss.
J. R. Preston	Belhaven College for Young Ladies.	Jackson, Miss.
J. L. Logan	McComb Female Institute	McComb, Miss.
J. W. Beeson, A. M.	Meridian Female College	Meridian, Miss.
Hon. James R. Preston, A. M.	Stanton College for Young Ladies	Natchez, Miss.
Mrs. Thida D. Moore.	Chickasaw Female College	Pontotoc, Miss.
H. G. Hawkins, A. B.	Port Gibson Female College	Port Gibson, Miss.
Mrs. W. T. Moore	Christian College	Columbia, Mo.
Wm. B. Peeler, B. S.	Stephens College	Do.
Rev. Henry E. Stout, Ph. B.	Howard Payne College	Fayette, Mo.
Rev. J. M. Spencer	Synodical Female College	Fulton, Mo.
Edward W. White, A. M.	Lexington College for Young Women.	Lexington, Mo.
Rev. Alfred F. Smith, A. B.	Central Female College	Do.
C. M. Williams, A. M.	Liberty Ladies College	Liberty, Mo.

III.—College Presidents—Continued.

2.—*Colleges for women*—Continued.

Name of president.	College.	Address.
J. W. Million, A. M	Hardin College	Mexico, Mo.
Mrs. V. A. C. Stockard	Cottey College for Young Ladies	Nevada, Mo.
Rev. George F. Ayres, Ph. D	Lindenwood College for Women	St. Charles, Mo.
Rev. George M. Ward, LL. D	Wells College	Aurora, N. Y.
Truman J. Backus, LL. D	Packer Collegiate Institute	Brooklyn, N. Y.
Rev. A. C. Mackenzie, LL. D	Elmira College	Elmira, N. Y.
Laura D. Gill, A. M., dean	Barnard College	New York, N. Y.
Rev. J. M. Taylor, LL. D	Vassar College	Poughkeepsie, N. Y.
Rev. C. B. King, A. M	Elizabeth College	Charlotte, N. C.
Mrs. Lucy H. Robertson	Greensboro Female College	Greensboro, N. C.
Daniel W. Rend	Claremont Female College	Hickory, N. C.
Mrs. Mary Davis Allen	Louisburg Female College	Louisburg, N. C.
John C. Scarborough, A. B	Chowan Baptist Female Institute	Murfreesboro, N. C.
F. P. Holgood, A. M	Oxford Female Seminary	Oxford, N.C.
Rev. R. T. Vann, D. D	Baptist Female University	Raleigh, N. C.
Rev. John H. Clewell, Ph. D	Salem Female Academy and College.	Salem, N. C.
Jane Shierzer, Ph. D	Oxford College	Oxford, Ohio.
Lillian W. Johnson, Ph. D	Western College	Do.
Miss Mary Evans, Litt. D	Lake Erie College	Painesville, Ohio.
Rev. Thomas S. Land, D. D	Allentown College for Women	Allentown, Pa.
Rev. J. Max Hark, D. D	Moravian Seminary and College for Women.	Bethlehem, Pa.
Rev. S. B. Linhart, A. M	Blairsville College	Blairsville, Pa.
Miss M. Carey Thomas, LL. D	Bryn Mawr College	Byrn Mawr, Pa.
M. H. Reaser, Ph. D	Wilson College	Chambersburg, Pa.
E. E. Campbell, Ph. D	Irving Female College	Mechanicsburg, Pa.
Rev. Henry D. Lindsay	Pennsylvania College for Women	Pittsburg, Pa.
Rev. W. W. Daniel, D. D	Columbia Female College	Columbia, S. C.
Miss Euphemia McClintock, A. B.	Presbyterian College for Women	Do.
Rev. James Boyce	Due West Female College	Duewest, S. C.
Lee D. Lodge, Ph. D	Limestone College	Gaffney, S. C.
A. S. Townes	Greenville College for Women	Greenville, S. C.
Edward C. James, Litt. D	Greenville Female College	Do.
Rev. John O. Willson, D. D	Lander College	Greenwood, S. C.
Robert P. Pell, A. B	Converse College	Spartanburg, S. C.
Rev. B. G. Clifford, D. D	Clifford Seminary	Union, S. C.
W. E. Martin, Ph. D	Sullins College	Bristol, Tenn.
T. E. Allen	Tennessee Female College	Franklin, Tenn.
Amos L. Edwards	Howard Female College	Gallatin, Tenn.
Rev. A. B. Jones, LL. D	Memphis Conference Female Institute.	Jackson, Tenn.
Martha A. Hopkins	Soule Female College	Murfreesboro, Tenn.
Mrs. J. O. Rust	Boscobel College	Nashville, Tenn.
J. D. Blanton, LL. D	Ward Seminary	Do.
Lawrence Rolfe, A. B	Synodical Female College	Rogersville, Tenn.
Rev. C. T. Carlton, A. B	Carlton College	Bonham, Tex.
W. A. Wilson, D. D	Baylor Female College	Belton, Tex.
James E. Willis, A. M	Chappell Hill Female College	Chappelhill, Tex.
Rev. J. E. Harrison, A. B	San Antonio Female College	San Antonio, Tex.
Rev. W. D. Mitchell	Martha Washington College	Abingdon, Va.
Miss Kate M. Hunt, A. B	Stonewall Jackson Institute	Do.
J. T. Henderson, A. M	Virginia Institute	Bristol, Va.
Rev. H. W. Tribble, D. D	Rawlings Institute	Charlottesville, Va.
R. E. Hatton, Ph. D	Roanoke College of Danville	Danville, Va.
Miss Mattie L. Cocke	Hollins Institute	Hollins, Va.
W. W. Smith, LL. D	Randolph-Macon Woman's College.	Lynchburg, Va.
Rev. J. J. Scherer, D. D	Marion Female College	Marion, Va.
Arthur K. Davis, A. M	Southern Female College	Petersburg, Va.
Rev. James Nelson, D. D	Woman's College	Richmond, Va.
Rev. R. L. Telford, D. D	Lewisburg Female Institute	Lewisburg, W. Va.
Miss Ellen C. Sabin, A. M	Milwaukee-Downer College	Milwaukee, Wis.

III.—College Presidents—Continued.

3.—*Schools of technology.*

Name of president.	Institution.	Address.
Charles C. Thach, LL. D	Alabama Polytechnic Institute	Auburn, Ala.
Barton O. Aylesworth, LL. D	Colorado Agricultural College	Fort Collins, Colo.
Victor C. Alderson, Sc. D	State School of Mines	Golden, Colo.
Rev. R. W. Stimson, A. M	Connecticut Agricultural College	Storrs, Conn.
K. G. Matheson, LL. D	State School of Technology	Atlanta, Ga.
Rev. Frank W. Gunsaulus, LL. D.	Armour Institute of Technology	Chicago, Ill.
W. E. Stone, Ph. D	Purdue University	Lafayette, Ind.
Carl L. Mees, Ph. D	Rose Polytechnic Institute	Terre Haute, Ind.
Rev. Albert B. Storms, LL. D.	Iowa College of Agriculture and Mechanic Arts.	Ames, Iowa.
Ernest R. Nichols, A. M	Kansas Agricultural College	Manhattan, Kans.
Rear-Admiral J. H. Sands, U. S. N., superintendent.	United States Naval Academy	Annapolis, Md.
R. W. Sylvester	Maryland Agricultural College	Collegepark, Md
K. L. Butterfield, A. M	Massachusetts Agricultural College.	Amherst, Mass.
H. S. Pritchett, LL. D	Massachusetts Institute of Technology.	Boston, Mass.
Edmund A. Engler, LL. D	Worcester Polytechnic Institute	Worcester, Mass.
J. L. Snyder, Ph. D	Michigan Agricultural College	Agricultural College, Mich.
F. W. McNair, B. S	Michigan College of Mines	Houghton, Mich.
J. C. Hardy, LL. D	Mississippi Agricultural and Mechanical College.	Agricultural College, Miss.
Levi J. Rowan, B. S	Alcorn Agricultural and Mechanical College.	Alcorn, Miss.
James M. Hamilton, M. S	Montana College of Agriculture and Mechanic Arts.	Bozeman, Mont.
Nathan R. Leonard, A. M	Montana State School of Mines	Butte, Mont.
W. D. Gibbs, M. S	New Hampshire College of Agriculture and Mechanic Arts.	Durham, N. H.
Alexander C. Humphreys, LL. D.	Stevens Institute of Technology	Hoboken, N. J.
Luther Foster, M. S. A	New Mexico College of Agriculture and Mechanic Arts.	Mesilla Park, N. Mex.
Robert P. Noble, A. M	New Mexico School of Mines	Socorro, N. Mex.
W. S. Aldrich, M. E., director	Clarkson School of Technology	Potsdam, N. Y.
Palmer C. Ricketts, C. E	Rensselaer Polytechnic Institute	Troy, N. Y.
Col. Hugh L. Scott, U. S. A., superintendent.	United States Military Academy	West Point, N. Y.
James B. Dudley, LL. D	Agricultural and Mechanical College for the Colored Race.	Greensboro, N. C.
George T. Winston, LL. D	North Carolina College of Agriculture and Mechanic Arts.	West Raleigh, N. C.
J. H. Worst, LL. D	North Dakota Agricultural College.	Agricultural College, N. Dak.
Charles S. Howe, Ph. D	Case School of Applied Science	Cleveland, Ohio.
Angelo C. Scott, A. M	Oklahoma Agricultural and Mechanical College.	Stillwater, Okla.
Thomas M. Gatch, Ph. D	Oregon Agricultural College	Corvallis, Oreg.
Howard Edwards, LL. D	Rhode Island College of Agriculture and Mechanic Arts.	Kingston, R. I.
Asbury Coward, LL. D., superintendent.	South Carolina Military Academy	Charleston, S. C.
P. H. Mell, Ph. D	Clemson Agricultural College	Clemson College, S. C.
Robert L. Slagle, Ph. D	South Dakota Agricultural College.	Brookings, S. Dak.
Charles H. Fulton, E. M	State School of Mines	Rapid City, S. Dak.
H. H. Harrington, M. S	Agricultural and Mechanical College of Texas.	College Station, Tex.
W. J. Kerr, Sc. D	Agricultural College of Utah	Logan, Utah.
J. M. McBryde, LL. D	Virginia Agricultural and Mechanical College and Polytechnic Institute.	Blacksburg, Va.
Scott Shipp, LL. D., superintendent.	Virginia Military Institute	Lexington, Va.
E. A. Bryan, LL. D	State College of Washington	Pullman, Wash.

IV.—Professors of Pedagogy and Heads of Departments of Pedagogy in Universities and Colleges.

Name of professor.	University or college.	Address.
Edward F. Buchner, Ph. D	University of Alabama	University, Ala.
Wm. S. Johnson, Ph. D	University of Arkansas	Fayetteville, Ark.
Fletcher B. Dressiar, Ph. D	University of California	Berkeley, Cal.
Arthur M. Smith, Ph. D	Pomona College	Claremont, Cal.
A. H. Chamberlain, A. M	Throop Polytechnic Institute	Pasadena, Cal.
E. P. Cubberley, Ph. D	Leland Stanford Junior University.	Stanford University, Cal.
Sanford Bell, A. M	University of Colorado	Boulder, Colo.
H. A. Ruger, A. B	Colorado College	Colorado Springs, Colo.
D. E. Phillips, Ph. D	University of Denver	University Park, Colo.
E. H. Sneath, LL. D	Yale University	New Haven, Conn.
Lewis B. Moore, Ph. D., dean	Howard University	Washington, D. C.
Lincoln Hulley, Ph. D., president.	John B. Stetson University	De Land, Fla.
W. F. Yocum, D. D	University of the State of Florida	Gainesville, Fla.
T. J. Woofter, Ph. D	University of Georgia	Athens, Ga.
George A. Towns, A. M	Atlanta University	Atlanta, Ga.
G. R. Glenn, LL. D., president	North Georgia Agricultural College.	Dahlonega, Ga.
Arthur W. Rowell	Clark University	South Atlanta, Ga.
M. F. Reed, B. S	University of Idaho	Moscow, Idaho.
Nathaniel Butler, LL. D., dean	University of Chicago	Chicago, Ill.
A. R. Taylor, Ph. D., president	James Millikin University	Decatur, Ill.
Henry C. Reichel, A. B	Eureka College	Eureka, Ill.
Herbert F. Fisk, LL. D	Northwestern University	Evanston, Ill.
Candis J. Nelson, A. B	Greenville College	Greenville, Ill.
Edwin G. Dexter, Ph. D	University of Illinois	Urbana, Ill.
J. A. Bergström, Ph. D	Indiana University	Bloomington, Ind.
R. B. Kleinsmid, A. M	De Pauw University	Greencastle, Ind.
Arthur K. Rogers, Ph. D	Butler College	Indianapolis, Ind.
F. D. Churchill, A. M	Moores Hill College	Moores Hill, Ind.
E. D. Starbuck, Ph. D	Earlham College	Richmond, Ind.
Burt W. Ayres, Ph. D	Taylor University	Upland, Ind.
J. P. Hugget, Ph. B	Coe College	Cedar Rapids, Iowa.
William F. Barr, Ph. B	Drake University	Des Moines, Iowa.
A. E. Bennett, A. M	Upper Iowa University	Fayette, Iowa.
Charles E. Shelton, LL. D., president.	Simpson College	Indianola, Iowa.
F. E. Bolton, Ph. D	State University of Iowa	Iowa City, Iowa.
R. M. Stewart, A. B., president.	Graceland College	Lamoni, Iowa.
Elizabeth Dean	Iowa Wesleyan University	Mount Pleasant, Iowa.
Geo. H. Betts, Ph. M	Cornell College	Mount Vernon, Iowa.
Guy G. Sears, A. M	Central University of Iowa	Pella, Iowa.
E. A. Brown, A. M	Morningside College	Sioux City, Iowa.
Wm. O. Allen, Ph. D	Tabor College	Tabor, Iowa.
Harold W. Foght, A. M	Midland College	Atchison, Kans.
Lillian Scott, Ph. B	Baker University	Baldwin, Kans.
Mrs. M. A. Ludlum	Emporia College	Emporia, Kans.
W. S. Reese, Ph. M	Campbell College	Holton, Kans.
A. S. Olin, A. M	University of Kansas	Lawrence, Kans.
	Bethany College	Lindsborg, Kans.
R. A. Schwegler, A. B	Ottawa University	Ottawa, Kans.
Albert H. King	Kansas Wesleyan University	Salina, Kans.
Otto W. Newby, A. B	Cooper College	Sterling, Kans.
	Fairmount College	Wichita, Kans.
B. W. Truesdell, A. B	Friends University	Do.
B. W. De Busk, A. B	Southwest Kansas College	Winfield, Kans.
John W. Dinsmore, A. M	Berea College	Berea, Ky.
Milford White, M. S	Agricultural and Mechanical College.	Lexington, Ky.
J. C. Willis, Ph. D	Kentucky University	Do.
C. J. C. Bennett, Ph. D	Louisiana State University	Baton Rouge, La.
R. W. Perkins, Ph. D., president.	Leland University	New Orleans, La.
Halbert H. Britan, Ph. D	Bates College	Lewiston, Me.
Charles A. Johnson, A. B	Morgan College	Baltimore, Md.
Robert H. Gault, Ph. D	Washington College	Chestertown, Md.
W. A. Garrison, A. M	New Windsor College	New Windsor, Md.
Paul H. Hanus, B. S	Harvard University	Cambridge, Mass.
George E. Dawson, Ph. D	Mount Holyoke College	South Hadley, Mass.
Anna J. McKeag, Ph. D	Wellesley College	Wellesley, Mass.
W. H. Burnham, Ph. D	Clark University	Worcester, Mass.
Rufus C. Bentley, A. M., dean	Collegiate Department, Clark University.	Do.
Sarah J. Knott, M. S	Adrian College	Adrian, Mich.
Geo. B. Randels, Ph. B	Alma College	Alma, Mich.
W. H. Payne, LL. D	University of Michigan	Ann Arbor, Mich.
Charles H. Gurney, A. M	Hillsdale College	Hillsdale, Mich.
J. M. Van der Meulen, A. M	Hope College	Holland, Mich.
Herbert L. Stetson, LL. D	Kalamazoo College	Kalamazoo, Mich.

IV.—Professors of Pedagogy and Heads of Departments of Pedagogy in Universities and Colleges—Continued.

Name of professor.	University or college.	Address.
E. G. Lancaster, Ph. D., president.	Olivet College	Olivet, Mich.
George F. James, Ph. D	University of Minnesota	Minneapolis, Minn.
Emil O. Chelgren, A. B	Gustavus Adolphus College	St. Peter, Minn.
J. G. Deupree, LL. D	University of Mississippi	University, Miss.
Albert R. Hill, Ph. D., dean	University of Missouri	Columbia, Mo.
Edgar J. Swift, Ph. D	Washington University	St. Louis, Mo.
Wm. C. T. Adams, Ph. D	Bellevue College	Bellevue, Nebr.
Josie Y. Osterhout	Cotner University	Bethany, Nebr.
Charles C. Lewis	Union College	College View, Nebr.
John F. Crawford, A. M	Grand Island College	Grand Island, Nebr.
G. W. A. Luckey, Ph. D	University of Nebraska	Lincoln, Nebr.
Wm. R. Jackson, A. M	Nebraska Wesleyan University	University Place, Nebr.
Romanzo Adams, Ph. D	Nevada State University	Reno, Nev.
Franklin C. Lewis, A. M	Dartmouth College	Hanover, N. H.
E. R. Payson, Ph. D	Rutgers College	New Brunswick, N. J.
Charles E. Hodgin, B. Ped	University of New Mexico	Albuquerque, N. Mex.
Charles B. Clark, A. M	Alfred University	Alfred, N. Y.
E. N. Henderson, Ph. D	Adelphi College	Brooklyn, N. Y.
W. H. Squires, Ph. D	Hamilton College	Clinton, N. Y.
M. S. Read, Ph. D	Colgate University	Hamilton, N. Y.
Charles De Garmo, Ph. D	Cornell University	Ithaca, N. Y.
James E. Russell, LL. D., dean	Columbia University (Teachers' College).	New York, N. Y.
T. M. Balliet, Ph. D., dean	New York University	Do.
George M. Forbes, A. M	University of Rochester	Rochester, N. Y.
J. R. Street, Ph. D	Syracuse University	Syracuse, N. Y.
Marcus C. S. Noble	University of North Carolina	Chapel Hill, N. C.
W. R. Connors, A. B	Livingstone College	Salisbury, N. C.
Darius Eatman, A. M	Wake Forest College	Wake Forest, N. C.
Joseph Kennedy, A. M., dean	University of North Dakota	University, N. Dak.
John B. Bowman, A. M	Mount Union College	Alliance, Ohio.
Henry G. Williams, A. M	Ohio University	Athens, Ohio.
Fletcher D. Ward, B. S	Baldwin University	Berea, Ohio.
William P. Burris, A. M	University of Cincinnati	Cincinnati, Ohio.
David R. Major, Ph. D	Ohio State University	Columbus, Ohio.
Edward A. Miller, A. B	Oberlin College	Oberlin, Ohio.
Harvey C. Minnich, A. M	Miami University	Oxford, Ohio.
J. E. McMullan, Ph. M	Scio College	Scio, Ohio.
	Heidelberg University	Tiffin, Ohio.
Sarah C. B. Scarborough, M. Pd.	Wilberforce University	Wilberforce, Ohio.
W. W. Weaver, A. M	Antioch College	Yellow Springs, Ohio.
H. P. Sheldon, Ph. D	University of Oregon	Eugene, Oreg.
Mary E. Reynolds, B. S	Willamette University	Salem, Oreg.
E. B. Huey, Ph. D	Western University of Pennsylvania.	Allegheny, Pa.
G. T. Ettinger, Ph. D	Muhlenberg College	Allentown, Pa.
Wm. L. Gooding, Ph. D	Dickinson College	Carlisle, Pa.
Geo. L. Omwake, A. M	Ursinus College	Collegeville, Pa.
James H. Leuba, Ph. D	Bryn Mawr College	Bryn Mawr, Pa.
C. M. Thomas, Ph. D	Grove City College	Grove City, Pa.
J. H. Brumbaugh	Juniata College	Huntingdon, Pa.
Thomas A. Edwards, A. M	Bucknell University	Lewisburg, Pa.
Francis B. Brandt, Ph. D	Central High School	Philadelphia, Pa.
S. B. Heckman, A. M	Temple College	Do.
	University of Pennsylvania	Do.
William Noetling, A. M	Susquehanna University	Selinsgrove, Pa.
W. B. Jacobs, A. M	Brown University	Providence, R. I.
Patterson Wardlaw, A. B	University of South Carolina	Columbia, S. C.
G. Le Roy Noyes, A. B	Claflin University	Orangeburg, S. C.
Samuel Weir, Ph. D., dean	Dakota Wesleyan University	Mitchell, S. Dak.
George M. Smith, A. M	University of South Dakota	Vermilion, S. Dak.
Henry K. Warren, LL. D	Yankton College	Yankton, S. Dak.
P. P. Claxton, A. M	University of Tennessee	Knoxville, Tenn.
Mary Stephens, A. M	Roger Williams University	Nashville, Tenn.
W. S. Sutton, A. M	University of Texas	Austin, Tex.
Albert F. Armstrong, A. M	Texas Christian University	North Waco, Tex.
Frederick Eby, Ph. D	Baylor University	Waco, Tex.
Daniel C. Jensen, A. B	Brigham Young College	Logan, Utah.
Wm. M. Stewart, M. Di	University of Utah	Salt Lake City, Utah.
W. H. Heck, A. M	University of Virginia	Charlottesville, Va.
Wilmot B. Lane, Ph. D	Randolph-Macon Woman's College.	Lynchburg, Va.
	College of William and Mary	Williamsburg, Va.
Albert H. Yoder, A. B	University of Washington	Seattle, Wash.
W. D. Turner, A. M	Bethany College	Bethany, W. Va.
Jasper N. Deahl, A. M	West Virginia University	Morgantown, W. Va.
Almon W. Burr, A. M	Beloit College	Beloit, Wis.
M. Vincent O'Shea, B. L	University of Wisconsin	Madison, Wis.
John F. Brown, Ph. D	University of Wyoming	Laramie, Wyo.

V.—Principals of Normal Schools.

Public normal schools.

Location.	Name of institution.	Principal.
ALABAMA.		
Florence	State Normal College	Marshall C. Wilson.
Jacksonville	do	C. W. Daugette.
Livingston	Alabama Normal College	Miss Julia S. Tutwiler.
Montgomery	State Normal School for Colored Students.	Wm. B. Paterson.
Normal	Agricultural and Mechanical College for Negroes.	W. H. Councill.
Troy	State Normal College	E. M. Shackelford.
ARIZONA.		
Flagstaff	Northern Arizona Normal School	A. N. Taylor.
Tempe	Tempe Normal School of Arizona	A. J. Matthews.
ARKANSAS.		
Pine Bluff	Branch Normal College	Isaac Fisher.
CALIFORNIA.		
Chico	California State Normal School	Chas. C. Van Liew.
Los Angeles	State Normal School	Jesse F. Millspaugh.
San Diego	do	Samuel T. Black.
San Francisco	do	Frederick Burk.
San Jose	do	Morris Elmer Dailey.
COLORADO.		
Greeley	Colorado State Normal School	Z. X. Snyder.
CONNECTICUT.		
Bridgeport	Bridgeport Training School	Bessie E. Howes.
Danbury	State Normal Training School	John R. Perkins.
New Britain	Normal Training School	Marcus White.
New Haven	State Normal Training School	Arthur B. Morrill.
Willimantic	do	Henry T. Burr.
DELAWARE.		
Wilmington	Teachers' Training School	Clara Mendenhall.
DISTRICT OF COLUMBIA.		
Washington	Washington Normal School No. 1	Anne M. Goding.
Do	Washington Normal School No. 2	Lucy E. Moten.
FLORIDA.		
Tallahassee	Florida State Normal and Industrial College.	Nathan B. Young.
GEORGIA.		
Athens	State Normal School	E. C. Branson.
Cornelia	Cornelia Normal Institute	C. H. Clyde.
Douglas	Southern Normal Institute	J. Walter Hendricks.
Milledgeville	Georgia Normal and Industrial College.	J. Harris Chappell.
Savannah	State Industrial College	R. R. Wright.
IDAHO.		
Albion	State Normal School	G. A. Axline.
Lewiston	do	Geo. H. Black.
ILLINOIS.		
Carbondale	Southern Illinois State Normal University.	D. B. Parkinson.
Charleston	Eastern Illinois State Normal School.	L. C. Lord.
Chicago, Station O	Chicago Normal School	Ella Flagg Young.
De Kalb	Northern Illinois State Normal School.	John W. Cook.
Normal	Illinois State Normal University	David Felmley.
Macomb	Western Illinois State Normal School.	J. W. Henninger.
INDIANA.		
Indianapolis	Indianapolis Normal School	M. E. Nicholson.
Terre Haute	Indiana State Normal School	William W. Parsons.

V.—Principals of Normal Schools—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
IOWA.		
Cedar Falls	Iowa State Normal School	Homer H. Seerley.
Woodbine	Woodbine Normal and Commercial School.	M. A. Reed.
KANSAS.		
Emporia	State Normal School	Jasper N. Wilkinson.
Hays	Western Branch State Normal School.	William S. Picken.
KENTUCKY.		
Frankfort	State Normal and Industrial Institute for Colored Persons.	James S. Hathaway.
Louisville	Louisville Normal School	W. J. McConathy.
LOUISIANA.		
Natchitoches	Louisville State Normal School	B. C. Caldwell.
New Orleans	New Orleans Normal School	Miss Margaret C. Hanson.
MAINE.		
Castine	Eastern State Normal School	Albert F. Richardson.
Farmington	Farmington State Normal School	George C. Purington.
Fort Kent	Madawaska Training School	Mary P. Nowland.
Gorham	State Normal School	Walter E. Russell.
Springfield	Springfield Normal School	Everett Peacock.
MARYLAND.		
Baltimore	Baltimore Teachers' Training School.	Sarah C. Brooks.
Do	Maryland State Normal School	E. B. Prettyman.
Frostburg	State Normal School	Edward Murdaugh.
MASSACHUSETTS.		
Boston	Boston Normal School	Wallace C. Boyden.
Do	Massachusetts Normal Art School	George H. Bartlett.
Bridgewater	State Normal School	Albert G. Boyden.
Fitchburg	do	John G. Thompson.
Framingham	do	Henry Whittemore.
Hyannis	do	Wm. A. Baldwin.
Lowell	do	F. F. Coburn.
Do	Training School	Gertrude Edmund.
North Adams	State Normal School	F. F. Murdock.
Salem	do	Joseph A. Pitman.
Westfield	do	Clarence A. Brodeur.
Worcester	do	E. Harlow Russell.
MICHIGAN.		
Detroit	Detroit Normal Training School	Chas. L. Spain.
Kalamazoo	Western State Normal School	D. B. Waldo.
Marquette	State Normal School	
Mount Pleasant	Central State Normal School	Chas. T. Grawn.
Ypsilanti	Michigan State Normal School	Lewis H. Jones.
MINNESOTA.		
Duluth	State Normal School	E. W. Bohannon.
Mankato	do	Chas. H. Cooper.
Moorehead	do	Frank A. Weld.
St. Cloud	do	W. A. Shoemaker.
St. Paul	Teachers' Training School	Hiram W. Slack.
Winona	State Normal School	G. E. Maxwell.
MISSISSIPPI.		
Paris	Paris Normal School	D. G. Carpenter.
Sherman	Mississippi Normal Institute	D. C. Langston.
Walnut Grove	Mississippi Central Normal School	John Rundle.
MISSOURI.		
Cape Girardeau	State Normal School	W. S. Dearmont.
Kirksville	State Normal School (first district).	John R. Kirk.
St. Louis	Teachers' College	John W. Withers.
Warrensburg	State Normal School (second district).	James E. Ament.
MONTANA.		
Dillon	Montana Normal School	Henry H. Swain.

V.—Principals of Normal Schools—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
NEBRASKA.		
Kearney	State Normal School	A. O. Thomas.
Peru	Nebraska State Normal School	W. A. Clark.
NEW HAMPSHIRE.		
Plymouth	State Normal School	J. E. Klock.
NEW JERSEY.		
Jersey City	Teachers' Training School	Joseph H. Brensinger.
Newark	Newark Normal and Training School.	W. S. Willis.
Paterson	Paterson Normal Training School.	Jesse D. Burks.
Trenton	New Jersey State Normal and Model Schools.	James M. Green.
NEW MEXICO.		
Las Vegas	New Mexico Normal University	Edmund J. Vert.
Silver City	Normal School of New Mexico	C. M. Light.
NEW YORK.		
Albany	New York State Normal College	Wm. J. Milne.
Auburn	Auburn Training School	M. Blanche Sheldon.
Brockport	State Normal and Training School	Charles T. McFarlane.
Brooklyn	Training School for Teachers	Emma L. Johnston.
Buffalo	Buffalo Normal School (State)	James M. Cassety.
Cohoes	Cohoes Training School	Emma S. Wardle.
Cortland	State Normal School	Francis J. Cheney.
Fredonia	do	F. B. Palmer.
Geneseo	Geneseo State Normal School	James V. Sturges.
Jamaica	Normal and Training School	A. C. McLachlan.
New Paltz	State Normal School	Myron T. Scudder.
New York	New York Training School for Teachers.	E. N. Jones.
Do	Normal College of the City of New York.	Thomas Hunter.
Oneonta	State Normal School	Percy I. Bugbee.
Oswego	Oswego State Normal and Training School.	Isaac B. Poucher.
Plattsburg	State Normal School	Geo. K. Hawkins.
Potsdam	State Normal and Training School	Thomas B. Stowell.
Rochester	Rochester Training School	Edith A. Scott.
Syracuse	Syracuse Teachers' Training School.	G. A. Lewis.
NORTH CAROLINA.		
Elizabeth City	State Colored Normal School	P. W. Moore.
Fayetteville	do	E. E. Smith.
Greensboro	State Normal and Industrial School.	Charles D. McIver.
Salisbury	State Normal School	J. O. Crosby.
NORTH DAKOTA.		
Mayville	State Normal School	Joseph Carhart.
Valley City	do	George A. McFarland.
OHIO.		
Akron	Perkins Normal School	Lee R. Knight.
Cleveland	Cleveland Normal and Training School.	J. W. McGilvrey.
Columbus	Columbus Normal School	Margaret W. Sutherland.
Dayton	Dayton Normal School	Grace A. Greene.
Toledo	Toledo Normal Training School	Mrs. Ella M. R. Baird.
OKLAHOMA.		
Alva	Northwestern Normal School	T. W. Conway.
Edmond	Central State Normal School	Frederick H. Umholtz.
Langston	Colored Agricultural and Normal University.	Inman E. Page.
Weatherford	Southwestern State Normal School	J. R. Campbell.
OREGON.		
Ashland	Southern Oregon State Normal School.	Benj. F. Mulkey.
Drain	Central Oregon State Normal School.	A. L. Briggs.
Monmouth	State Normal School	Edwin De Vore Ressler.
Weston	Eastern State Normal School	Robert Carver French.

V.—Principals of Normal Schools—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
PENNSYLVANIA.		
Bloomsburg	State Normal School	Judson P. Welsh.
California	Southwestern State Normal School.	Theo. B. Noss.
Clarion	Clarion State Normal School	J. Geo. Becht.
East Stroudsburg	East Stroudsburg State Normal School.	E. L. Kemp.
Edinboro	State Normal School	John F. Bigler.
Indiana	Indiana Normal School of Pennsylvania.	D. J. Waller, jr.
Kutztown	Keystone State Normal School	A. C. Rothermel.
Lockhaven	Central State Normal School	J. R. Flickinger.
Mansfield	Mansfield State Normal School	Andrew T. Smith.
Millersville	First Pennsylvania State Normal School.	E. Oram Lyte.
Philadelphia	Philadelphia Normal School for Girls.	J. M. Willard.
Pittsburg	Pittsburg High School, Normal Department.	Jane Ralston.
Shippensburg	Cumberland Valley State Normal School.	G. M. D. Eckels.
Slippery Rock	Slippery Rock State Normal School.	Albert E. Maltby.
Westchester	State Normal School	George M. Phillips.
RHODE ISLAND.		
Providence	Rhode Island State Normal School.	Charles S. Chapin.
SOUTH CAROLINA.		
Rockhill	Winthrop Normal College	D. B. Johnson.
SOUTH DAKOTA.		
Madison	State Normal School	J. W. Heston.
Spearfish	——do	F. L. Cook.
Springfield	——do	J. S. Frazee.
TENNESSEE.		
Nashville	Peabody College for Teachers	James D. Porter.
TEXAS.		
Denton	North Texas Normal School	J. S. Kendall.
Detroit	Detroit Normal School	W. A. Dean.
Huntsville	Sam Houston Normal Institute	H. C. Pritchett.
Prairie View	Prairie View State Normal and Industrial College.	Ed. L. Blackshear.
UTAH.		
Cedar City	Branch Normal School	G. W. Decker.
VERMONT.		
Castleton	State Normal School	Philip R. Leavenworth.
Johnson	——do	Edward D. Collins.
Randolph Center	——do	Charles H. Morrill.
VIRGINIA.		
Farmville	State Female Normal School	J. L. Jarman.
Hampton	Hampton Normal and Agricultural Institute.	H. B. Frissell.
Petersburg	Virginia Normal and Industrial Institute.	J. H. Johnston.
WASHINGTON.		
Bellingham	State Normal School	Edward T. Mathes.
Cheney	——do	Harry M. Shafer.
Ellensburg	——do	W. E. Wilson.
WEST VIRGINIA.		
Fairmont	State Normal School	W. L. McCowan.
Glenville	——do	John C. Shaw.
Huntington	Marshall College, State Normal School.	Lawrence J. Corbly.
Institute	West Virginia Colored Institute	J. McH. Jones.
Shepherdstown	Shepherd College, State Normal School.	J. G. Knutti.
West Liberty	West Liberty State Normal School.	Lorain Fortney.

V.—Principals of Normal Schools—Continued.

Public normal schools—Continued.

Location.	Name of institution.	Principal.
WISCONSIN.		
Manitowoc	Manitowoc County Training School for Teachers.	Fred. Christiansen.
Menomonie	Dunn County Teachers' Training School.	G. L. Bowman.
Do	Stout Training Schools	L. D. Harvey.
Milwaukee	State Normal School	Charles McKenney.
Oshkosh	——do	R. H. Halsey.
Platteville	——do	J. W. Livingston.
River Falls	River Falls State Normal School	W. J. Brier.
Stevens Point	State Normal School	Theron B. Pray.
Superior	——do	I. C. McNeill.
Wausau	Marathon County Training School	O. E. Wells.
Whitewater	State Normal School	Albert Salisbury.

Private normal schools.

ALABAMA.		
Cullman	Normal Department, Polytechnic College and Ladies' Institute.	S. A. Fetter.
Falkville	Falkville Normal College	S. M. Goodrich.
Fort Payne	North Alabama College	Edwin R. Eldridge.
Mobile	Emerson Normal Institute	Rev. A. T. Burnell.
Snow Hill	Snow Hill Normal and Industrial Institute.	W. J. Edwards.
Tuskegee	Tuskegee Normal and Industrial Institute.	B. T. Washington.
ARKANSAS.		
Green Forest	Ozark Normal School	W. D. Crawford.
Pea Ridge	Pea Ridge Masonic College	S. C. Parish.
COLORADO.		
Denver	Denver Normal and Preparatory School.	Fred. Pick.
DISTRICT OF COLUMBIA.		
Washington	Kindergarten Normal Training School.	Miss Susan P. Pollock.
FLORIDA.		
Jasper	Jasper Normal Institute	W. B. Cate.
Orange Park	Orange Park Normal and Manual Training School.	Rev. Walter S. Eaton.
GEORGIA.		
Augusta	Haines Manual and Industrial Institute.	Miss Lucy C. Laney.
Macon	Ballard Normal School	George C. Burrage.
Social Circle	Negro Normal and Industrial School.	James A. Love.
Thomasville	Allen Normal and Industrial School.	Abbie B. Howland.
Waynesboro	Haven Normal Academy	W. H. Bryan.
ILLINOIS.		
Addison	German Evangelical Lutheran Teachers' Seminary.	E. A. W. Krauss.
Dixon	Dixon College and Normal School	W. H. Williamson.
Hoopeston	Greer College	E. L. Bailey.
Oregon	Wells School for Teachers	H. W. Sullivan.
Rushville	Rushville Normal and Business College.	Maxwell Kennedy.
INDIANA.		
Danville	Central Normal College	A. J. Kinnaman.
Indianapolis	Indiana Kindergarten and Primary Normal Training School.	Eliza A. Blaker.
Marion	Marion Normal College	C. W. Boucher.
Muncie	Indiana Normal School	Francis M. Ingler.
Rochester	Rochester Normal University	Wm. H. Banta.
Valparaiso	Valparaiso University	H. B. Brown.

V.—Principals of Normal Schools—Continued.

Private normal schools—Continued.

Location.	Name of institution.	Principal.
IOWA.		
Denison	Denison Normal School	W. C. Van Ness.
Lemars	Lemars Normal College	Herman H. Thoren.
Newton	Newton Normal College	G. W. Wormley.
Perry	Perry Normal School	E. L. Meek.
Shenandoah	Western Normal College	J. M. Hussey.
Waukon	Waukon Normal School	W. L. Peck.
KANSAS.		
Salina	Salina Normal University	Charles Swisher.
KENTUCKY.		
Hardinsburg	Hardinsburg Normal College	Prof. Haley.
Hazard	Hazard Baptist Institute	W. H. Sasser.
Lexington	Chandler Normal School	Fannie J. Webster.
Middleburg	Middleburg Normal College	M. H. Judd.
Morehead	Morehead Normal School	F. C. Button.
Waddy	Central Normal College	E. J. Paxton.
LOUISIANA.		
New Orleans	Luther College	F. J. Lankenan.
MAINE.		
Lee	Lee Normal Academy	Chas. M. Teague.
MARYLAND.		
Baltimore	Baltimore Normal School (colored).	George Harrison.
MASSACHUSETTS.		
Boston (1069 Boylston)	Froebel School, Kindergarten Normal Classes.	Annie C. Rust.
Boston	Garland Kindergarten Training School.	Margaret Stannard.
Do	Kindergarten Training School	Lucy Wheelock.
Waltham	Notre Dame Training School	Sister Berchmans.
MICHIGAN.		
Detroit	Thomas Normal Training School	Jennie L. Thomas.
Petoskey	Petoskey Normal School	M. O. Graves.
MINNESOTA.		
Madison	Normal School of the United Norwegian Lutheran Church.	O. Lokensgaard.
New Ulm	Dr. Martin Luther College	John Schaller.
MISSISSIPPI.		
Shelby	Shelby Normal School	J. M. Williamson.
Tougaloo	Normal Department Tougaloo University.	Frank G. Woodworth.
MISSOURI.		
Chillicothe	Chillicothe Normal Business and Shorthand College.	Allen Moore.
Columbia	Columbia Normal Academy	Geo. H. Beasley.
Piedmont	Hale's College	W. H. Hale.
Stanberry	Stanberry Normal School	F. L. Maxwell.
NEBRASKA.		
Fremont	Fremont Normal School	W. H. Clemmons.
Santee	Santee Normal Training School	Alfred L. Riggs.
Wayne	Nebraska Normal College	J. M. Pile.
NORTH CAROLINA.		
Asheville	Normal and Collegiate Institute	Rev. Thos. Lawrence.
Charlotte	Rowan Normal Industrial Institute.	C. C. Somerville.
Enfield	Jos. K. Brick Agricultural, Industrial, and Normal School.	T. S. Inborden.
Franklinton	Albion Academy, Normal and Industrial School.	Rev. John A. Savage.
Henderson	Henderson Normal Institute	J. A. Cotton.
Liberty	Liberty Normal College	Thos. C. Amick.
Raleigh	St. Augustine's School	Rev. A. B. Hunter.
Wilmington	Gregory Normal Institute	Geo. A. Woodard.
Winton	Waters Normal Institute	C. S. Brown.

V.—Principals of Normal Schools—Continued.

Private normal schools—Continued.

Location.	Name of institution.	Principal.
OHIO.		
Ada	Ohio Northern University	L. A. Belt.
Canfield	Northeastern Ohio Normal School	C. O. Allaman.
Dayton	St. Mary's Academy	Brother Joseph Meyer.
Lebanon	National Normal University	J. Oscar Creager.
New Philadelphia	John P. Kuhn's Normal School	John P. Kuhn.
PENNSYLVANIA.		
Muncy	Lycoming County Normal School	H. A. Spotts.
Cheyney	Institute for Colored Youth	H. M. Browne.
SOUTH CAROLINA.		
Charleston	Avery Normal Institute	Morrison A. Holmes.
Frogmore	Penn Normal and Industrial School.	Miss Ellen Murray.
Greenwood	Brewer Normal School	Rev. J. M. Robinson.
Lancaster	Lancaster Normal and Industrial Institute.	M. D. Lee.
SOUTH DAKOTA.		
Sioux Falls	Lutheran Normal School	Rev. A. Mikkelsen.
TENNESSEE.		
Chattanooga	Chattanooga Normal University	James A. Roberts.
Dickson	Tennessee Normal School	T. B. Loggins.
Fountain City	Tennessee Normal College	W. S. Bryan.
Hornbeak	West Tennessee Normal College	W. L. Willingham.
Huntingdon	Southern Normal University	A. E. Booth.
Madison	Nashville Agricultural and Normal Institute.	Edward A. Sutherland.
Memphis	Le Moyne Normal Institute	A. J. Steele.
Morristown	Morristown Normal Academy	Judson S. Hill.
TEXAS.		
Commerce	East Texas Normal College	W. L. Mayo.
VIRGINIA.		
Keysville	Keysville Mission Industrial School.	Wm. H. Hayes.
Richmond	Hartshorn Memorial College	Lyman B. Tefft.
WEST VIRGINIA.		
Harpers Ferry	Storer College	Henry T. McDonald.
WISCONSIN.		
Milwaukee	National German-American Teachers' Seminary.	Max Griebsch.
St. Francis	Catholic Normal School of the Holy Family.	Rev. M. J. Lochemes.

CHAPTER XVIII.

STATISTICS OF STATE SCHOOL SYSTEMS.

Each State of the Union has a public school system of its own, supported by funds derived from its own resources and administered by officers chosen in accordance with its own laws. The General Government does not give direct financial aid to the common schools of any of the States and does not in any manner interfere with their management. These facts are not well understood abroad. Letters of inquiry addressed to this Bureau by many intelligent foreigners indicate that they regard the United States as having a national system of education, at least partly supported by the General Government.

It is true that our State school systems are very similar in many essentials and present such uniformity in methods of administration and instruction that a traveler from abroad visiting the schools of half the States would not suspect that they are not under the same general management. The casual observer would not learn that several States expend annually for schools $25 per capita of school population and several less than $3 per capita; that one State maintains its schools one hundred and ninety-four days in the year and another only eighty-eight; that one State pays its teachers $65 per month and another only $28; that one State enrolls over 90 per cent of its school population, and another less than 45 per cent. A study of the school statistics of each State would be necessary to reveal these and other strong points of difference. The systems are sufficiently uniform to make possible a statistical comparison, and the points of difference are so marked as to make a study of the tables interesting and instructive.

It is not possible to present each year complete and accurate returns from all the State systems. Many of the State reports are only biennial and others are long delayed in publication.

In the tables which follow, the statistics of State school systems include elementary and secondary schools, both urban and rural. Thus the enrollment of 16,468,300 in the common schools of the States includes the enrollment of 4,506,678 in the public schools of the 594 cities of 8,000 population and over, and the enrollment of 707,205 in the 618 cities and villages of 4,000 to 8,000 population. The grand total includes 679,702 students in public high schools, city and rural, belonging to State school systems. The statistics of city school systems are given separately in Chapter XIX of this report, and the statistics of high schools in Chapter XXIV.

Table 1 of this chapter shows that the population of the United States in 1905, as estimated by the Census Office, was 82,584,061. Based upon the ratios which prevailed in 1900, the estimated number of children 5 to 18 years of age was 23,410,800, and the number of male persons 21 years of age and over was 22,977,384. The school age is assumed to be 5 to 18, i. e., including all children just completing their fifth year and entering their sixth, all who have no more than completed their eighteenth year, and all between these ages.

Several items of more or less value in a study of common school statistics will be found in Table 2; for example, density of population, urban population, nativity and race classification, percentage of illiteracy, etc.

Table 3 shows for each State the age for free attendance at the public schools, age for compulsory attendance, date of latest school census reported, age of persons enumerated, and the number of persons enumerated.

The number of pupils enrolled in the common schools at different dates since 1870 will be found in Table 4. In 1870–71 the enrollment was 61.45 per cent of the school population, in 1879–80 it was 65.5 per cent, in 1889–90 it was 68.61 per cent, and in 1899–1900 it had reached 72.43 per cent. In 1904–5 the enrollment was 70.35 per cent of the estimated total school population. It is possible that there has been a falling off in the percentage of enrollment, but it may be, on the other hand, that the increase of population has been overestimated.

Table 6 shows that of the total enrollment of 16,468,300 in 1904–5 there were 8,266,855 boys and 8,201,445 girls. The enrollment was 19.94 per cent of the total population as compared with 20.51 per cent in 1900 and 20.32 per cent in 1890.

The average daily attendance at various periods is given in Table 7. In 1904–5 the average number of pupils actually present at school each day was 11,481,531, or 69.72 for each 100 enrolled.

Table 8 shows the average length of school term at various periods. The length of the school year increased from one hundred and thirty-two days in 1870–71 to one hundred and fifty-one in 1904–5. There was in the latter year an average of seventy-four days of schooling for every child 5 to 18 and an average of one hundred and five days attended by each pupil enrolled.

There were 460,269 teachers employed in the public schools in 1904–5, the number of men being 110,532, or 24 per cent of the total number. In 1870 the percentage of male teachers was 41. The percentages for other years are given in Table 10.

Table 11 shows the average monthly wages of teachers, number of schoolhouses, value of school property, and the estimated number of pupils enrolled in private schools.

Tables 12 to 18, inclusive, relate to the receipts and expenditures of school moneys by the States. The aggregate expenditure for 1904–5 was $291,616,660, or $3.53 per capita of population, as compared with $2.24 in 1890 and $1.75 in 1870–71.

Tables 19 and 20 show the total true valuation of real and personal property in 1880, 1890, 1900, and 1904. Expenditures for public schools are shown for each of these years. In 1880 there was an expenditure of 17.9 cents for public schools on each $100 of wealth, in 1890 it was 21.7 cents, in 1900 it had reached 24.3 cents, and in 1904 the estimate was 25.5 cents.

The permanent school funds and values of school lands possessed by the States are shown in Table 21. The diagrams which conclude the chapter are easily understood.

TABLE 1.—*The total population, the school population, and the adult male population.*

State or Territory.	Estimated total population in 1905.	The school population. Estimated number of children 5 to 18 years of age in 1905.			Percentage of boys	Estimated number of male persons 21 years and over in 1905.
		Boys.	Girls.	Total.		
1	2	3	4	5	6	7
United States	82,584,061	11,796,216	11,614,584	23,410,800	50.38	22,977,384
North Atlantic Division	22,666,560	2,795,226	2,783,478	5,588,004	50.02	6,807,507
South Atlantic Division	11,230,260	1,797,570	1,774,819	3,572,389	50.32	2,699,853
South Central Division	15,525,907	2,562,069	2,516,427	5,078,496	50.42	3,731,485
North Central Division	28,257,830	4,028,969	3,967,836	8,000,305	50.48	5,126,577
Western Division	4,903,404	562,393	566,624	1,151,006	50.59	1,624,922
North Atlantic Division:						
Maine	711,150	83,258	81,446	164,704	50.55	222,845
New Hampshire	420,118	46,200	46,404	92,004	49.89	136,501
Vermont	349,251	41,545	40,075	81,620	50.90	110,105
Massachusetts	3,088,540	341,422	344,853	686,275	49.75	929,216
Rhode Island	470,961	55,023	55,399	110,422	49.83	139,463
Connecticut	989,390	113,355	113,537	226,892	49.96	305,897
New York	7,301,784	948,459	948,641	1,890,100	49.81	2,375,856
New Jersey	2,102,020	301,403	304,141	525,549	49.74	628,148
Pennsylvania	6,834,115	911,556	909,882	1,810,438	50.35	1,967,940
South Atlantic Division						
Delaware	192,855	25,967	25,159	51,126	50.79	50,393
Maryland	1,290,909	175,959	175,087	351,650	50.04	341,106
District of Columbia	302,983	31,690	34,126	65,816	48.15	91,089
Virginia	1,753,284	310,899	306,935	617,834	50.32	472,018
West Virginia	1,056,205	166,219	159,790	325,910	51.00	273,440
North Carolina	2,031,749	341,765	334,195	675,960	50.56	448,101
South Carolina	1,474,991	256,070	250,923	506,703	50.54	303,522
Georgia	2,435,921	402,334	400,248	802,582	50.13	542,348
Florida	597,492	92,667	92,076	184,743	50.16	157,771
South Central Division						
Kentucky	2,291,444	350,140	350,062	700,202	50.04	580,127
Tennessee	2,147,995	340,415	337,463	680,878	50.87	537,906
Alabama	1,965,347	335,898	327,145	663,043	50.66	449,543
Mississippi	1,662,195	290,561	282,355	571,916	50.63	378,608
Louisiana	1,513,145	247,496	245,033	492,529	50.25	357,084
Texas	3,455,209	584,546	571,597	1,156,143	50.56	835,891
Arkansas	1,404,229	230,314	234,400	474,014	00.55	335,002
Oklahoma	555,201	89,382	85,510	174,903	51.11	152,040
Indian Territory	408,000	87,000	82,882	169,808	51.22	133,664
North Central Division						
Ohio	4,469,185	567,740	576,101	1,183,841	50.50	1,282,553
Indiana	2,678,602	375,270	365,760	741,130	50.63	767,079
Illinois	5,319,150	720,275	735,566	1,455,851	50.16	1,546,114
Michigan	2,527,276	349,123	342,720	691,743	50.47	700,226
Wisconsin	2,356,887	336,896	332,745	669,621	50.31	622,748
Minnesota	1,971,949	292,634	286,725	579,359	50.51	578,969
Iowa	2,391,632	344,844	336,532	681,376	50.61	660,695
Missouri	3,340,405	494,084	484,107	978,191	50.51	915,587
North Dakota	383,226	56,028	56 148	114,776	51.08	114 317
South Dakota	428,055	67,699	64,824	132,483	51 07	120,030
Nebraska	1,068,220	163,038	158,995	321,931	50.64	301,005
Kansas	1,982,472	236,851	231,143	469,994	50.62	445 554
Western Division						
Montana	293 534	33 121	32,220	65,341	50.69	122 972
Wyoming	107,921	13,441	12,235	25,676	52.35	44,034
Colorado	612,925	74,664	74,238	148,922	50.15	237,448
New Mexico	212,925	33,183	31,984	65,167	50.92	88,019
Arizona	140,276	18,526	17,735	36,261	51 09	50,204
Utah	309,754	50,456	50,455	100,911	50.00	75,179
Nevada	42 335	4,640	4 373	9,013	51 48	17,711
Idaho	193,382	29,012	27,785	56,797	51 08	96,112
Washington	598,528	76 896	74 474	151,370	50 80	225 995
Oregon	461,451	61,771	59,720	121,500	50.84	161,231
California	1,020,963	186,052	183,398	370 048	50.44	593,927

TABLE 2.—*Density of population, urban population, activity and race classification, value of manufactures, illiteracy, and relations of the adult male and of the school population.*

[NOTE.—The statistics in this table, except those in columns 12 and 13, are from the U. S. Census of 1900.]

State or Territory.	The total population.					Value of manufactured products per capita of population.	The adult male population 21 years and over.				Number of children 5 to 15 years of age to every 100 persons of the total population.	
	Number of persons to a square mile.	Per cent in incorporated places of 8,000 and over.	Per cent of native and foreign white and of colored.				Number to every 100 children 5 to 15 years of age.	Per cent of illiterates unable to write among adult males.				
			Native white.	Foreign white.	Colored.[a]			Native white.	Foreign white.	Negro.	1870.	1900.
1	2	3	4	5	6	7	8	9	10	11	12	13
United States	25.6	32.5	74.4	13.4	12.2	$74.55	26.3	4.9	11.5	47.4	31.3	25.3
North Atlantic Div.	129.6	57.0	75.6	22.5	1.9	$49.22	121.5	2.0	15.2	15.3	28.3	24.4
South Atlantic Div.	38.9	17.0	62.2	2.0	35.8	35.48	75.3	11.5	11.3	51.1	33.0	31.8
South Central Div.	23.1	11.4	67.2	2.5	30.3	20.44	73.1	11.1	15.6	52.5	33.9	32.8
North Central Div.	34.9	30.6	82.1	15.8	2.1	46.09	101.6	2.9	7.9	34.5	32.4	28.2
Western Division	3.5	31.2	76.1	14.6	5.3	$73.95	141.1	2.4	7.7	15.4	25.6	25.1
North Atlantic Div.:												
Maine	23.2	23.7	95.3	13.4	.3	$54.23	135.3	3.1	21.4	17.3	28.0	23.2
New Hampshire	45.7	38.6	75.4	27.4	.2	137.22	147.3	2.0	24.0	14.8	24.8	21.6
Vermont	37.6	11.2	98.7	13.0	.3	80.80	154.0	4.1	23.3	19.7	27.2	23.4
Massachusetts	348.9	67.0	75.5	20.9	1.3	171.99	133.4	.7	13.8	10.5	23.5	22.2
Rhode Island	407.0	66.1	66.6	31.2	2.2	204.60	136.3	2.0	18.2	15.4	25.7	22.5
Connecticut	187.5	52.0	72.1	26.1	1.8	144.04	134.6	1.9	15.6	13.1	23.9	22.9
New York	162.6	66.5	72.5	26.0	1.5	141.67	125.7	1.8	12.1	11.3	26.1	23.9
New Jersey	230.3	61.2	73.4	22.5	3.5	133.15	116.0	2.3	13.4	16.3	29.0	25.0
Pennsylvania	140.1	45.5	81.9	15.6	2.5	125.73	108.7	2.5	20.2	17.5	30.6	26.5
South Atlantic Div.:												
Delaware	94.2	41.4	75.9	7.5	16.6	101.42	110.3	7.1	17.6	42.7	31.8	26.5
Maryland	120.5	46.9	72.3	7.9	19.8	82.02	97.0	5.1	10.7	40.3	31.3	27.9
Dist. of Columbia	4,645.3	100.0	61.7	7.0	31.3	101.53	138.4	.9	5.0	26.1	27.0	21.7
Virginia	46.2	14.7	63.3	1.0	35.7	30.91	76.4	12.2	10.3	52.5	32.4	31.6
West Virginia	38.9	7.7	93.1	2.4	4.5	33.20	83.9	10.7	22.5	37.8	34.1	30.8
North Carolina	39.0	5.1	66.5	.2	33.3	22.10	66.3	16.9	5.7	53.1	33.6	33.3
South Carolina	44.4	7.5	41.2	.4	58.4	18.44	61.1	12.3	5.2	54.7	33.2	34.6
Georgia	37.6	11.0	52.7	.6	46.7	21.55	67.7	11.8	5.6	56.4	34.4	33.4
Florida	9.7	15.0	52.6	3.7	43.7	40.06	85.4	8.3	9.2	50.4	34.0	30.9
South Central Div.:												
Kentucky	53.7	16.9	84.4	2.3	13.3	33.22	81.9	14.3	8.6	49.5	34.4	31.9
Tennessee	48.4	13.4	75.3	.9	23.8	21.92	75.4	14.1	7.7	47.6	34.1	32.0
Alabama	35.5	7.3	53.9	.8	45.3	20.04	67.8	13.8	5.0	50.5	34.4	33.4
Mississippi	32.5	2.6	40.8	.5	58.7	12.08	66.2	8.1	9.5	53.2	33.7	34.0
Louisiana	30.4	22.8	40.	3.	47.2	28.14	72.5	16.9	24.6	61.3	31.1	32.6
Texas	11.6	11.3	73.6	5.8	20.4	17.16	72.3	5.8	25.4	45.1	34.8	33.5
Arkansas	24.7	5.4	70.9	1.	28.0	16.19	70.8	10.5	6.4	44.8	34.2	33.8
Oklahoma	10.3	5.0	88.4	3.9	7.7	8.61	87.5	2.7	6.3	32.0	.....	31.3
Indian Territory	12.6	0.0	76.0	1.2	22.8	4.25	72.8	10.7	10.8	41.3	.....	34.1
North Central Div.:												
Ohio	102.0	38.5	86.7	11.0	2.3	92.50	110.2	3.2	9.6	21.8	31.7	26.5
Indiana	70.1	24.	92.	5.6	2.3	64.84	103.5	4.4	9.6	27.7	33.8	27.7
Illinois	86.1	47	78.2	20.0	1.6	107.84	106.2	2.8	7.8	18.7	32.2	27.4
Michigan	42.2	30.9	76.8	22.3	.9	65.01	109.9	2.4	10.2	14.0	30.3	27.1
Wisconsin	38.0	30.7	74.6	24.9	.5	73.45	93.0	1.9	9.3	12.7	33.6	29.7
Minnesota	22.1	26.3	70.	28.8	.8	50.95	98.5	1.0	6.4	6.9	32.5	29.4
Iowa	40.2	16.8	85.7	13.7	.6	28.43	99.9	1.6	5.2	22.0	33.1	28.5
Missouri	45.2	30.8	87.9	6.9	5.2	54.88	93.6	5.4	6.8	31.9	33.6	29.5
North Dakota	4.5	3.0	62.4	35.3	2.3	11.18	99.6	1.0	6.3	16.5	33.7	30.0
South Dakota	5.2	2.6	72.8	22.0	5.2	10.97	90.6	.8	4.9	16.3		31.0
Nebraska	13.9	15.8	82.5	16.6	.9	39.19	93.5	1.0	5.1		28.	30.1
Kansas	18.0	14.0	87.7	8.6	3.7	29.00	94.8	1.7	6.4	22.	29.8	29.7
Western Division:												
Montana	1.7	27.0	67.4	25.6	7.0	100.17	158.2	.8	6.7	10.	10.2	22.3
Wyoming	.9	24.1	78.3	17.9	3.8	26.11	171.5	.8	7.8	21.2	9.4	23.9
Colorado	5.2	38.1	81.2	16.8	2.0	66.60	139.3	2.4	7.	13.9	22.5	24.7
New Mexico	1.6	0.0	35.5	6.8	7.7	13.78	92.1	23.6	30.9	16.3	31.9	30.6
Arizona	1.1	0.0	57.4	18.2	24.4	104.54	138.7	4.5	30.9	1	16.8	25.9
Utah	3.4	25.2	79.4	19.1	1.5	30.00	74.5	1.2	4.6	4.	35.	32.6
Nevada	.4	0.0	63.3	20.3	16.4	19.31	196.5	.8	7.0	22	12.6	21.3
Idaho	1.9	0.0	82.0	13.5	4.5	12.15	116.4	1.1	5.7	15.	11.3	28.6
Washington	7.7	31.9	76.1	19.7	4.2	72.76	149.3	.5	3.9		27.0	25.3
Oregon	4.4	23.9	82.4	13.0	4.6	48.10	122.7	1.1	3.	9.	32.3	26.3
California	9.5	43.7	73.2	21.3	5.5	77.27	160.5	1.1	8.	14.	24.5	22.8

[a] *Including Mongolians and Indians.*

[b] Less cost of raw material.

TABLE 3.—*School ages in the several States—State school censuses.*

State or Territory.	Age for free attendance at the public schools.	Age for compulsory attendance.[a]	School census. Date of latest school census reported.	School census. Age of persons enumerated.	School census. Number of persons enumerated. Boys.	Girls.	Total.
1	2	3	4	5	6	7	8
North Atlantic Division:							
Maine	5-21	7-15	1905	5-21	.....	.....	207,284
New Hampshire	(b)	8-14	1904	5-16	35,221	35,134	70,355
Vermont	(b)	8-15	1905	5-18	39,512	38,704	78,216
Massachusetts	(b)	7-14	1905	5-15	254,139	259,017	513,156
Rhode Island	(b)	7-13	1905	5-15	47,787	47,590	95,377
Connecticut	(b)	7-15	1905	4-16	.....	.....	217,931
New York	5-21	8-16	1905	5-18	892,618	904,620	1,797,238
New Jersey	5-20	7-14	(c)	5-18	266,485	260,598	529,083
Pennsylvania	6-21	8-16	1902	6-16	.....	.....	1,004,728
South Atlantic Division							
Delaware	6-21	(d)	1904	6-21	17,999	17,016	35,015
Maryland	5-20	e 8-16	1902	5-20	.....	.....	370,892
District of Columbia	6-17	8-14	f 1904	6-17	f 28,703	f 31,058	f 59,761
Virginia	7-20	.....	1905	7-20	.....	.....	578,320
West Virginia	6-21	8-14	1905	6-21	171,730	161,132	332,862
North Carolina	6-21	(d)	1904	6-21	354,767	341,855	696,622
South Carolina	6-21	(d)	(g)	.....	.....	.....	.....
Georgia	6-18	(d)	1903	6-18	353,608	349,525	703,133
Florida	6-21	(d)	1900	6-21	.....	.....	182,600
South Central Division:							
Kentucky	6-20	7-14	1903	6-20	304,255	291,332	595,587
Tennessee	6-21	(d)	1905	6-21	391,039	381,255	772,294
Alabama	7-21	(d)	1904	7-21	.....	.....	679,050
Mississippi	5-21	(d)	1902	6-21	314,545	313,850	628,395
Louisiana	6-18	(d)	1903	6-18	236,274	223,322	459,596
Texas	8-17	(d)	1905	8-17	407,271	391,404	798,675
Arkansas	6-21	(d)	1905	6-21	263,902	254,780	518,682
Oklahoma	6-21	(d)	1905	6-21	108,721	102,895	211,616
Indian Territory[h]	.....	(d)	1901	6-21	79,915	76,501	156,416
North Central Division							
Ohio	6-21	8-16	1905	6-21	643,366	611,424	1,254,790
Indiana	6-21	7-14	1905	6-21	396,448	372,224	768,672
Illinois	6-21	7-14	1905	6-21	734,534	720,548	1,455,082
Michigan	5-20	7-16	1905	5-20	376,487	366,097	743,184
Wisconsin	4-20	7-14	1905	4-20	392,090	381,767	773,857
Minnesota	6-21	8-16	(g)	.....	.....	.....	.....
Iowa	5-21	7-14	1905	5-21	363,152	355,630	718,782
Missouri	6-20	8-14	1905	6-20	505,092	493,035	998,727
North Dakota	6-20	8-14	1905	[illegible]	65,798	61,114	126,912
South Dakota	6-21	8-14	1905	6-21	70,895	67,800	138,695
Nebraska	5-21	7-15	1905	5-21	191,887	185,011	376,898
Kansas	5-21	8-15	1905	5-21	256,708	246,606	503,314
Western Division:							
Montana	6-21	8-14	1903	6-21	32,813	31,810	64,623
Wyoming	6-21	7-16	1905	6-21	10,074	9,823	19,897
Colorado	6-21	8-14	1905	6-21	92,656	91,423	184,079
New Mexico	5-21	7-14	1905	5-21	36,602	33,317	69,919
Arizona	6-21	8-14	1906	6-21	14,999	14,291	29,290
Utah	6-18	8-14	1904	[illegible]	45,939	45,743	91,682
Nevada	6-18	8-14	1904	6-18	4,851	4,579	9,430
Idaho	5-21	8-14	1905	5-21	36,584	35,442	72,026
Washington	6-21	8-16	1905	5-21	104,905	102,194	207,099
Oregon	4-21	8-14	1905	4-20	77,360	75,540	152,930
California	16-21	8-14	1905	5-17	212,859	206,456	419,315

[a] The compulsory period here given is in many cases extended or shortened under certain circumstances.
[b] Not limited by law.
[c] State census of 1905.
[d] No compulsory law.
[e] Applies only to Baltimore city and Allegany County.
[f] Estimated for 1904.
[g] No State school census.
[h] Returns imperfect.
[i] May be extended.

TABLE 4.—*Number of pupils enrolled in the common schools at different dates and the relation of the enrollment to the school population.*

State or Territory.	Number of different pupils of all ages enrolled during the school year (excluding duplicate enrollments).					Per cent of school population (i. e., of children 5 to 18 years of age) enrolled.				
	1870-71	1879-80.	1889-90.	1899-1900.	1904-5.	1870-71.	1879-80.	1889-90.	1899-1900.	1904-5.
1	2	3	4	5	6	7	8	9	10	11
United States.	7,561,582	9,867,505	12,722,581	15,503,110	16,468,309	61.45	65.50	68.61	72.43	70.35
North Atlantic Div	2,743,344	2,930,345	3,112,022	3,643,949	3,906,624	77.95	75.17	70.45	70.86	69.68
South Atlantic Div	603,619	1,242,811	1,795,486	2,182,615	2,322,740	30.51	50.74	59.22	65.73	65.02
South Central Div	767,899	1,371,975	2,202,579	3,018,699	3,321,852	34.17	46.43	60.14	67.28	65.15
North Central Div	3,300,660	4,033,528	5,015,217	5,642,562	5,923,472	76.87	75.84	76.46	78.05	74.04
Western Division	146,120	288,546	515,477	835,368	994,612	54.77	64.96	70.01	79.51	86.41
N. Atlantic Div.										
Maine	a152,600	149,827	139,676	130,918	122,448	a87.35	80.80	85.68	81.38	80.42
N. Hampshire	71,957	64,841	59,813	65,688	77,922	91.31	81.32	71.28	73.98	84.15
Vermont	b65,384	73,235	b65,606	65,964	66,721	....	87.21	....	82.15	81.76
Massachusetts	273,661	306,777	371,492	474,891	497,904	72.54	71.76	72.56	76.21	72.55
Rhode Island	a34,000	40,604	52,774	67,231	71,425	a.9.24	59.59	62.65	66.79	64.69
Connecticut	113,598	119,604	126,905	155,228	168,779	90.83	76.97	72.02	74.54	74.39
New York	1,028,110	1,031,503	1,042,160	1,209,574	1,311,108	82.98	77.10	70.71	69.87	69.37
New Jersey	169,430	204,961	234,672	322,575	369,409	63.20	64.77	62.21	68.35	70.29
Pennsylvania	834,014	937,310	1,020,522	1,154,880	1,269,008	76.35	74.37	69.53	68.90	66.83
S. Atlantic Div.										
Delaware	20,058	27,823	31,434	36,895	c 36,895	50.04	65.20	66.19	75.33	c75.33
Maryland	115,683	162,431	184,251	222,373	226,825	46.70	56.13	60.37	67.00	64.89
Dist. Columbia	15,157	28,439	36,906	46,519	51,230	41.60	55.40	63.10	76.81	77.85
Virginia	131,088	220,736	342,269	370,895	361,772	32.34	45.00	60.51	63.19	58.56
West Virginia	76,999	142,850	193,064	232,343	247,505	49.47	69.21	75.27	78.69	75.95
North Carolina	a115,000	252,612	322,533	400,452	474,111	a31.23	55.37	56.39	63.55	70.14
South Carolina	66,056	134,072	201,260	281,891	302,663	27.28	40.56	47.06	60.74	60.92
Georgia	49,678	236,533	381,297	482,673	499,103	14.89	46.24	58.45	65.30	63.16
Florida	14,000	39,315	92,472	108,874	d 122,636	21.21	44.16	71.10	66.57	d67.94
S. Central Div.										
Kentucky	a178,457	a278,000	399,600	509,294	e/501,482	....	.....	65.64	75.27	e/72.52
Tennessee	a140,000	300,217	447,950	485,554	508,423	a32.00	58.21	74.05	75.03	74.47
Alabama	141,342	179,490	301,645	376,423	g 400,000	40.36	42.60	55.83	61.67	60.33
Mississippi	117,000	236,654	334,158	386,507	f 403,647	40.00	61.29	70.02	73.27	f72.84
Louisiana	57,639	77,642	120,253	196,109	210,116	24.78	25.87	31.58	43.02	42.66
Texas	63,504	a220,000	406,372	659,508	756,019	21.00	a42.40	59.50	64.57	65.40
Arkansas	89,927	61,972	228,071	314,662	325,705	40.29	30.81	56.41	71.02	70.84
Oklahoma	..	..	..	90,002	158,322	....	.....	.....	79.82	90.47
Indian Ter'y	..	..	..	..	48,078	..	.....	.....	.....	29.30
N. Central Div.										
Ohio	719,372	729,499	797,499	829,160	826,148	84.04	76.69	76.54	75.49	70.98
Indiana	450,057	541,283	512,955	564,907	560,121	78.64	82.39	79.21	81.10	74.23
Illinois	672,787	704,041	778,319	958,911	985,134	81.01	74.61	71.97	72.69	67.67
Michigan	292,486	302,550	427,082	504,985	521,463	79.66	78.08	73.45	77.12	75.30
Wisconsin	265,295	299,457	351,723	445,142	465,114	73.92	73.78	69.77	72.51	69.48
Minnesota	113,983	180,248	280,960	399,207	420,005	75.92	75.87	74.59	77.49	74.23
Iowa	241,039	426,057	493,267	560,223	540,337	84.44	83.52	85.51	89.06	79.30
Missouri	330,070	482,986	630,224	719,817	728,800	56.03	68.85	74.43	78.62	74.50
North Dakota	a 1,000	13,718	35,343	77,689	106,909	a39.26	41.08	71.28	81.24	83.13
South Dakota			78,043	98,822	109,151			81.04	79.40	82.37
Nebraska	23,205	92,549	240,209	268,227	278,715	58.79	68.48	75.35	80.58	86.57
Kansas	89,777	231,434	300,222	389,582	381,595	74.22	73.23	88.56	88.21	81.19
Western Div.										
Montana	a 1,057	4,270	16,980	39,430	f 44,881	70.24	63.77	71.14	72.80	f72.63
Wyoming	a 430	2,907	7,052	14,512	18,345	a45.34	77.44	54.46	65.68	71.46
Colorado	4,357	22,119	65,490	117,555	137,918	42.29	60.82	72.20	68.19	92.62
New Mexico	a1,320	4,755	18,215	36,735	37,670	a4.42	13.32	42.25	61.43	57.81
Arizona	0	4,213	7,989	16,504	21,792	0.00	53.16	52.72	51.94	60.16
Utah	16,992	24,328	37,279	73,042	e75,602	53.36	30.61	55.26	81.02	e76.61
Nevada	3,106	9,045	7,387	9,676	e7,319	53.97	79.73	73.90	74.08	e81.20
Idaho	906	5,834	14,311	36,000	57,377	46.06	77.85	62.66	79.18	101.02
Washington	a5,000	14,780	55,964	115,104	170,386	a60.00	72.36	70.59	87.86	112.54
Oregon	21,000	37,533	63,254	99,405	108,036	67.73	75.02	74.78	82.12	88.92
California	91,332	158,765	221,756	269,736	315,226	63.63	78.37	77.28	79.85	85.19

a Approximate.
b Pupils of legal school age only.
c In 1899-1900.
d In 1903-4.
e Highest number enrolled.
f In 1902-3.
g Estimated by State superintendent
h Returns imperfect.

TABLE 5.—*Per cent of the school population (i. e., children 5 to 18 years of age) enrolled in the public schools, for a period of years.*

Year.	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870-71	61.45	77.95	30.51	34.17	76.87	54.77
1871-72	62.20	77.33	32.27	37.94	77.04	54.43
1872-73	62.36	76.79	35.86	38.67	75.97	57.52
1873-74	64.40	77.77	42.10	40.82	76.98	61.04
1874-75	65.54	78.59	44.61	42.47	77.54	64.39
1875-76	64.70	78.55	46.72	37.36	77.05	66.37
1876-77	63.92	76.83	47.02	38.51	75.60	66.12
1877-78	65.75	77.09	48.85	43.50	77.38	66.26
1878-79	64.64	76.18	46.72	44.71	75.28	65.63
1879-80	65.50	75.17	50.74	46.43	75.84	64.96
1880-81	65.03	74.28	51.49	47.03	74.59	64.82
1881-82	65.03	74.56	51.90	47.02	74.15	65.93
1882-83	66.39	74.15	54.30	50.68	75.13	67.05
1883-84	66.96	72.83	56.25	53.59	75.06	68.01
1884-85	67.96	73.23	57.17	56.57	75.46	68.53
1885-86	68.14	72.63	57.68	56.82	76.08	68.03
1886-87	67.98	72.23	58.98	56.21	75.77	67.97
1887-88	68.33	71.60	58.68	58.67	75.96	68.53
1888-89	68.20	70.60	58.40	58.28	76.63	69.39
1889-90	68.61	70.45	59.22	60.14	76.46	70.01
1890-91	69.40	70.04	60.15	63.01	76.25	75.49
1891-92	69.51	69.78	59.50	63.72	76.30	77.98
1892-93	69.70	68.99	61.94	63.92	76.23	77.16
1893-94	71.32	70.45	63.08	66.00	78.04	77.45
1894-95	71.54	71.53	62.21	65.83	78.17	79.32
1895-96	71.80	71.57	62.46	66.75	78.16	79.72
1896-97	72.36	72.12	64.49	67.75	78.06	78.27
1897-98	72.68	71.78	66.25	67.36	78.66	78.00
1898-99	71.96	71.69	64.93	66.54	77.75	77.85
1899-1900	72.43	70.86	65.73	67.28	78.65	79.51
1900-1901	71.67	70.71	66.65	65.22	77.36	80.69
1901-2	71.45	70.31	66.55	65.12	76.85	82.49
1902-3 [a]	70.67	69.84	65.99	64.60	75.49	82.46
1903-4 [a]	70.59	69.89	66.01	64.66	74.82	84.95
1904-5 [a]	70.35	69.88	65.02	65.15	74.04	86.41

[a] Subject to correction.

TABLE 6. *The school enrollment of 1904–5, classified by sex—Percentage of the total population enrolled at different dates.*

State or Territory.	Number of different pupils of all ages enrolled.			Per cent of the total population enrolled.				
	Boys.	Girls.	Total.	1870–71.	1879–80.	1889–90.	1899–1900.	1904–5.
1	2	3	4	5	6	7	8	9
United States	a 5,266,855	a 5,201,445	16,468,300	19.14	19.67	20.32	20.51	19.94
North Atlantic Division	a 1,970,937	a 1,945,687	3,905,624	21.05	20.20	17.99	17.31	17.08
South Atlantic Division	a 1,142,263	a 1,130,347	2,272,740	19.65	16.36	20.16	20.90	20.67
South Central Division	a 1,663,259	a 1,658,532	3,321,852	11.56	15.36	20.90	22.05	21.38
North Central Division	a 2,904,149	a 2,929,253	5,923,472	24.50	22.23	22.43	22.19	20.89
Western Division	a 357,016	a 497,326	964,612	13.99	16.32	17.03	19.93	21.79
North Atlantic Division:								
Maine	.....	.....	132,445	24.25	23.09	21.13	18.85	18.64
New Hampshire	.....	.....	77,622	22.41	18.34	15.89	15.96	17.69
Vermont	33,047	33,674	66,721	b 19.77	22.64	b 19.74	19.20	19.10
Massachusetts	.....	.....	495,904	15.31	17.20	16.59	16.93	16.12
Rhode Island	35,903	35,522	71,425	15.11	14.69	15.27	15.69	15.19
Connecticut	.....	.....	165,779	20.93	19.22	16.95	17.09	17.06
New York	658,229	652,879	1,311,108	23.18	20.30	17.37	16.64	16.59
New Jersey	196,761	192,646	389,407	18.26	15.12	16.29	17.12	17.57
Pennsylvania	604,405	605,413	1,209,818	23.24	21.89	19.41	18.26	17.73
South Atlantic Division:								
Delaware	.....	.....	c 36,995	17.79	15.96	18.66	19.98	c 19.98
Maryland	.....	.....	228,825	14.55	17.37	17.65	18.72	17.99
District of Columbia	24,231	26,999	51,230	11.23	14.86	16.02	16.69	16.91
Virginia	.....	.....	361,772	10.47	14.59	20.67	19.99	18.53
West Virginia	127,556	119,949	247,505	16.85	23.10	25.31	24.23	23.42
North Carolina	237,944	226,167	474,111	10.45	18.65	19.93	21.14	23.34
South Carolina	142,498	160,165	302,663	9.05	13.46	17.49	21.03	21.09
Georgia	242,449	256,654	499,103	4.65	15.34	20.75	21.78	21.08
Florida	60,402	62,234	d 122,636	7.19	14.39	23.63	20.60	d 21.02
South Central Division:								
Kentucky	250,521	250,961	e f 501,482	13.21	16.74	21.50	23.30	e f 22.48
Tennessee	276,056	272,367	548,423	10.90	19.46	25.34	24.02	23.68
Alabama	.....	.....	g 400,000	13.85	14.22	19.93	20.59	20.14
Mississippi	190,404	214,243	e 403,647	13.70	20.91	25.92	24.92	e 24.77
Louisiana	103,554	106,562	210,116	7.73	8.26	10.75	14.20	13.89
Texas	378,501	377,425	756,019	7.26	13.82	20.88	21.64	21.58
Arkansas	169,683	166,082	335,765	13.72	10.21	19.77	23.99	23.93
Oklahoma	81,540	76,782	158,322	.....	.....	.....	25.01	28.36
Indian Territory h	.....	.....	45,075	.....	.....	.....	.....	9.65
North Central Division:								
Ohio	423,075	403,073	826,148	26.50	22.81	21.72	19.94	18.78
Indiana	277,371	272,750	550,121	26.34	25.85	23.40	22.44	20.54
Illinois	497,687	487,447	985,134	25.90	22.88	20.34	19.89	18.52
Michigan	261,879	259,584	521,463	23.98	22.15	20.39	20.86	20.39
Wisconsin	.....	.....	465,114	24.60	22.76	20.85	21.51	20.61
Minnesota	.....	.....	430,005	24.47	23.09	21.58	22.70	21.81
Iowa	.....	.....	540,337	28.19	26.23	25.80	25.37	22.59
Missouri	364,551	364,249	728,800	18.74	22.27	23.15	23.17	21.95
North Dakota	54,313	52,596	106,909	9.34	10.15	19.45	24.34	27.90
South Dakota	50,420	52,711	103,131			23.74	24.60	25.48
Nebraska	142,059	136,656	278,715	16.61	20.46	22.69	27.03	26.09
Kansas	192,962	188,633	381,595	22.28	23.23	27.98	26.49	24.11
Western Division:								
Montana	.....	.....	e 44,881	7.54	10.90	12.85	16.20	e 16.20
Wyoming	9,213	9,132	18,345	4.55	13.98	11.62	15.68	17.07
Colorado	.....	.....	137,918	9.33	11.38	15.89	21.78	22.87
New Mexico	20,901	16,769	37,670	1.40	3.98	11.86	18.81	17.70
Arizona	11,275	10,517	21,792	0.00	10.42	13.40	13.42	15.53
Utah	38,008	37,654	d 75,662	18.61	16.90	17.93	26.30	d 24.96
Nevada	3,636	3,683	d 7,319	7.04	14.53	16.14	15.77	d 17.29
Idaho	28,492	28,885	57,377	5.59	17.89	16.96	22.67	28.92
Washington	86,758	83,628	170,386	18.62	19.68	16.02	22.22	28.47
Oregon	54,308	53,658	108,036	21.63	21.47	20.16	21.62	23.42
California	161,181	154,045	315,226	15.61	18.36	18.36	18.16	19.45

a Estimated in part.
b Pupils of legal school age.
c In 1899–1900.
d In 1903–4.
e In 1902–3.
f Approximate.
g Estimated by State superintendent.
h Returns imperfect.

TABLE 7.—*The average daily attendance at various periods, and its relation in 1904–5 to the enrollment.*

State or Territory.	Average number of pupils actually present at school each day.					Number attending daily for each 100 enrolled in 1904–5.
	1870–71.	1879–80.	1889–90.	1899–1900.	1904–5.	
1	2	3	4	5	6	7
United States	4,545,317	6,144,143	8,153,635	10,652,772	11,481,531	69.72
North Atlantic Division	1,627,208	1,824,457	2,036,459	2,636,892	2,903,751	75.88
South Atlantic Division	308,111	776,798	1,126,683	1,344,334	1,458,923	62.82
South Central Division	535,632	902,707	1,467,649	2,015,467	2,075,832	62.50
North Central Division	1,911,720	2,451,167	3,188,732	4,080,460	4,269,083	72.05
Western Division	102,646	188,924	334,112	555,629	713,942	71.78
North Atlantic Division						
Maine	100,392	103,115	98,364	97,697	97,845	73.87
New Hampshire	48,150	48,966	41,526	47,276	49,876	64.03
Vermont	a 44,100	48,606	45,857	47,020	48,352	72.47
Massachusetts	201,750	233,127	273,910	366,136	404,117	81.16
Rhode Island	22,485	27,217	33,905	47,124	53,830	75.39
Connecticut	62,683	73,546	83,656	111,564	129,143	76.51
New York	493,648	573,089	642,964	857,488	996,433	76.00
New Jersey	86,817	115,194	133,286	207,947	254,045	68.77
Pennsylvania	567,188	601,627	682,941	854,640	930,110	76.87
South Atlantic Division:						
Delaware	a 12,700	17,439	19,649	a 25,300	a b 25,300	a b 68.57
Maryland	56,435	85,778	102,351	134,400	138,911	61.25
District of Columbia	10,261	20,637	28,184	35,463	40,596	79.24
Virginia	77,402	128,404	198,290	216,464	215,205	59.49
West Virginia	51,336	91,604	121,700	151,254	163,068	65.89
North Carolina	a 73,000	170,100	203,100	206,918	280,288	59.13
South Carolina	a 44,700	a 90,600	147,799	201,295	200,435	66.22
Georgia	31,377	145,190	240,791	298,237	311,499	62.41
Florida	a 10,900	27,046	54,819	75,003	c 82,631	c 68.19
South Central Division:						
Kentucky	120,566	178,000	225,739	310,339	a d 309,836	a d 61.78
Tennessee	a 89,000	208,528	323,543	338,506	348,688	68.55
Alabama	107,656	117,978	182,467	297,805	c 210,000	52.50
Mississippi	a 90,000	156,761	207,704	224,526	d 233,175	d 57.77
Louisiana	a 40,500	a 54,800	87,536	146,323	146,234	69.60
Texas	a 41,000	a 132,000	291,941	438,779	501,734	66.37
Arkansas	a 46,000	a 54,700	a 148,714	195,401	207,440	61.77
Oklahoma	....	....	....	63,718	90,238	57.00
Indian Territory f	....	....	....	....	a 28,487	a 60.00
North Central Division						
Ohio	432,452	476,279	549,269	616,365	623,707	75.48
Indiana	295,071	321,039	342 275	429,566	415,622	75.55
Illinois	341,686	431,638	538,310	737,576	811,919	82.42
Michigan	a 193,000	a 240,000	a 282,000	355,226	407,977	78.23
Wisconsin	a 132,000	a 156,000	200,457	a 309,800	290,743	62.51
Minnesota	50,894	a 78,400	127,025	243,224	280,508	65.23
Iowa	211,562	259,836	306,309	373,474	375,563	69.51
Missouri	187,024	a 281,000	384 627	460,012	470,656	64.58
North Dakota	a 1,040	8,530	20,694	43,560	67,883	63.50
South Dakota			48,327	a 68,000	75 289	68.90
Nebraska	a 14,300	90,156	146,139	181,874	185,172	66.44
Kansas	52.891	137,609	243,300	261,783	264,034	60.19
Western Division:						
Montana	a 1,100	a 3,000	10,596	a 26,300	d 31,471	d 70.12
Wyoming	a 250	1,920	a 4,700	a 9,650	a 12,200	a 66.49
Colorado	2,611	12,618	38,715	73,291	91,997	66.71
New Mexico	a 880	3,150	a 13,000	22,433	25,705	68.24
Arizona	0	2,847	4,702	10,177	14,009	64.29
Utah	12,819	17,178	30,967	50,595	c 56,183	c 74.26
Nevada	a 1,800	5,401	5,064	4,698	c 5,182	c 70.40
Idaho	a 600	3,863	a 9,500	21,962	40,738	71 00
Washington	a 3,300	10,546	36,946	74,717	118,852	69 75
Oregon	a 15,000	27 435	43,333	64,411	78,114	72.33
California	64,286	109,966	146,589	197,395	230,491	75.98

a Approximately.
b In 1899–1900.
c In 1903–4.
d In 1902–3.
e Estimated by State Superintendent.
f Returns imperfect.

TABLE 8.—*(1) Average length of school term at various periods; (2) aggregate number of days' schooling given to all pupils; (3) the same compared with the school population and the enrollment (columns 8 and 9).*

State or Territory.	Average number of days the schools were kept during the year.					Aggregate number of days' schooling given in 1904-5.	Average number of days' schooling given for every child 5 to 18 years of age in 1904-5.	Average number of days attended by each pupil enrolled in 1904-5.
	1870-71	1879-80.	1889-90.	1899-1900.	1904-5.			
1	2	3	4	5	6	7	8	9
United States	132.1	130.3	134.7	144.3	150.9	1,752,845,238	71	106.2
North Atlantic Division	152	153.2	166.6	175.5	179	530,379,324	94.9	135.8
South Atlantic Division	97.4	92.4	99.9	112.1	122.9	179,408,650	50.2	77.2
South Central Division	91.6	79.2	88.2	99.8	107.6	224,407,290	43.8	67
North Central Division	151.9	139.8	148	155.9	160.9	687,203,055	85.8	116
Western Division	119.2	129.2	135	141.5	157.5	112,446,869	97.7	113.1
North Atlantic Division:								
Maine	98	100	112	141	139	13,600,155	93.6	102.7
New Hampshire	70	105.3	117.7	147.65	152.45	7,603,506	82.1	97.6
Vermont	115.6	125.5	136	156.15	157	7,591,314	93	113.8
Massachusetts	169	177	177	189	187	75,599,879	110.1	151.8
Rhode Island	170	184	188	191	194	10,191,260	95	146.9
Connecticut	172.4	179	182.5	189.01	187.78	24,250,473	106.9	143.7
New York	176	178.5	186.5	175	187.6	187,174,648	99	142.8
New Jersey	178	192	192	186	188	48,387,285	92.1	131
Pennsylvania	127.2	133.4	117.6	166.6	167.4	155,709,414	86	128.7
South Atlantic Division:								
Delaware	132	158	166	170.1	[a]170.1	[b] 1,303,530	[b]87.9	[b]118.6
Maryland	103	107	131	131	142	26,670,912	75.6	117.6
District of Columbia	200	193	178	179	181	7,347,676	111.7	143.4
Virginia	93.2	112.8	118.2	120	128	27,540,240	44.5	76.1
West Virginia	76.8	90	97	109	123	20,057,361	61.5	81
North Carolina	[c]50	70	59.25	70.5	91.5	26,284,968	39.2	65.9
South Carolina	[d]100	70	64.6	88.1	105.7	21,188,335	42.6	70
Georgia	59	[d]65	83.3	112	[e]118	[d]36,755,700	45.8	73.6
Florida			120	93	[e]108	[e]4,053,731	[e]50.2	[e]73.8
South Central Division:								
Kentucky	[d]110	102	91	117.5	[e]160	[e][d]27,885,240	[e][d]30.3	[e][d]55.8
Tennessee	[d]77	66	86	96	113	39,401,744	57.3	77.5
Alabama	66.5	81.3	73.5	78.3	[f]102.5	[d]21,525,000	32.5	53.8
Mississippi	110	74.5	[d]86	101.2	[e]123	[e]28,080,525	[e]51.8	71.1
Louisiana	[d]65	78.8	100.6	120	[e]130	[d]19,010,420	38.6	90.5
Texas	[f]100	71.7	100	108.2	112	55,917,189	48.4	74
Arkansas			[d]75	77.5	88	18,254,720	38.5	54.4
Oklahoma				95.3	101	9,381,752	53.7	59.3
Indian Territory [g]					115	[d]3,317,300	19.5	69
North Central Division:								
Ohio	165	152	166.5	165	160	99,783,120	85.7	120.8
Indiana	98.5	136	150	152	160	66,499,520	80.7	120.6
Illinois	146.7	170	155.4	152	160	137,538,098	94.5	130.6
Michigan	140	150	156	163.8	168	68,540,156	99.1	131.4
Wisconsin	125	165	158.6	[h]160	[f]169	[d]49,135,567	73.4	105.6
Minnesota	[d]93	91	128	160	161.1	45,182,638	78	105.1
Iowa	130	148	156	160	160	60,030,080	88.2	111.2
Missouri	90	[e]104	120.4	141	152	70,516,474	72.1	96.8
North Dakota	[d]75	[d]96	113	155.7	141	9,572,558	83.4	89.6
South Dakota			115	[f]129.1	140	10,531,316	79.4	98.8
Nebraska	72	82	140	135	170.2	31,518,788	97.8	113.1
Kansas	116	120	135	126.25	145	38,294,900	81.5	100.3
Western Division								
Montana	[d]80	96	112.7	107	[h]107	[e][d]3,367,397	[e][d]54.5	[e][d]75
Wyoming	[d]200	119	[d]120	[d]140	[d]140	1,715,708	66.8	93.5
Colorado	92	[d]132	114.4	149.8	[e]158.1	[d]14,572,427	97.9	105.7
New Mexico	[d]111	111	[d]67	96.6	111	2,930,370	44.9	77.8
Arizona	0	109	126	125	135.4	1,906,819	52.3	87
Utah	152	128	133	151	[e]153	[e]8,606,004	[e]87	[e]113.6
Nevada	142	103	110	151	[e]158.7	[e]822,383	[e]91.2	[e]112.4
Idaho	[d]45	90	[d]60.8	106	[e]136	[d]5,540,568	97.5	96.6
Washington	[d]80	[d]91	97.2	127.6	167.6	19,918,788	131.6	114.9
Oregon	[d]90	90	118.2	116.6	[e]138.4	[d]12,379,257	101.8	114.5
California	123	146.6	157.6	166.2	170	[d]10,713,170	110	129.2

[a] Certain States report their school term in months; these months have been reduced to days by multiplying by 20 in each case.

[b] In 18 @ 1900.

[c] In 1902-3.

[d] *Approximately.*

[e] In 1903-4.

[f] In 1901-2.

[g] Returns imperfect.

[h] In 1903-04.

[i] In 1902-1903.

[j] In 1897-98.

TABLE 9.—*(1) Length of school term. (2) The aggregate number of days' schooling given compared with the school population.*

Year.	Average length of school term, in days.						Average number of days schooling given for every child 5 to 18 years of age					
	The United States.	North Atlantic Division.	South Atlantic Division.	South Central Division	North Central Division.	Western Division.	The United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870-71	132.1	152.0	97.4	91.6	133.9	119.2	48.7	70.2	18.1	21.8	59.6	45.9
1871-72	133.4	151.9	103.4	97.7	136.1	121.8	49.5	68.9	20.3	25.8	59.8	46.0
1872-73	129.1	154.6	97.4	89.1	129.6	118.3	47.8	67.9	21.7	23.4	56.8	45.0
1873-74	128.8	154.8	95.6	81.1	132.6	119.0	49.6	70.4	24.5	21.9	59.8	46.1
1874-75	130.4	158.7	96.2	81.0	134.6	132.5	51.0	72.9	26.1	23.5	60.2	53.6
1875-76	133.1	158.0	95.6	82.5	139.1	150.3	51.4	73.7	26.8	20.1	62.2	54.4
1876-77	132.1	157.2	91.4	80.3	139.8	130.1	51.1	73.6	26.3	19.8	62.3	54.3
1877-78	132.0	157.6	89.7	86.7	140.1	129.9	53.2	75.6	26.8	24.3	64.3	54.5
1878-79	130.2	160.1	88.6	81.9	136.4	132.0	52.0	75.0	25.7	23.9	62.3	56.7
1879-80	130.3	159.2	92.4	79.2	139.8	129.2	53.1	74.5	29.3	24.2	64.4	54.9
1880-81	130.1	158.7	92.4	82.1	138.8	133.8	52.0	72.2	28.5	25.0	62.7	56.9
1881-82	131.2	160.6	95.9	82.5	137.1	136.2	52.9	73.3	30.6	25.6	63.2	58.0
1882-83	129.8	161.0	96.9	82.5	137.1	132.6	53.8	74.4	32.0	26.8	63.9	57.3
1883-84	129.1	156.0	95.6	85.9	138.6	133.8	55.5	72.5	32.7	30.0	67.7	61.6
1884-85	130.7	163.1	93.4	87.5	139.1	131.8	56.8	77.2	33.7	31.4	67.3	58.3
1885-86	130.4	161.8	93.4	86.9	140.4	130.8	57.3	76.7	33.7	32.0	68.7	59.6
1886-87	131.3	165.9	95.3	87.5	139.5	131.6	57.7	77.8	34.8	32.1	68.7	59.1
1887-88	132.3	164.4	95.7	87.0	144.0	130.7	58.7	76.8	35.5	33.6	71.3	57.3
1888-89	133.7	164.1	95.0	88.9	147.5	135.7	58.9	76.7	35.4	34.0	71.6	61.7
1889-90	134.7	166.6	99.9	88.2	148.0	135.0	59.2	76.8	37.3	33.9	71.9	61.2
1890-91	135.7	168.1	103.8	92.0	145.8	136.9	60.7	78.1	38.1	35.8	73.2	65.9
1891-92	136.9	169.1	105.3	94.1	146.8	139.1	61.5	78.3	38.2	37.7	73.6	71.1
1892-93	136.3	169.6	103.4	93.0	146.6	138.8	62.3	78.7	39.2	37.5	75.1	70.8
1893-94	139.5	172.3	108.3	97.5	150.2	137.1	65.9	82.2	42.4	40.3	79.1	72.4
1894-95	139.5	172.8	108.5	98.8	150.8	142.4	66.9	84.8	42.0	39.0	81.0	77.0
1895-96	140.5	175.5	107.8	98.2	151.9	142.0	68.1	86.8	42.1	39.8	82.3	78.7
1896-97	142.0	173.3	110.9	98.3	152.8	148.6	69.7	85.9	43.0	42.3	83.1	82.5
1897-98	143.0	174.3	113.8	97.4	152.8	151.7	71.2	90.4	46.9	42.5	84.8	82.1
1898-99	143.0	174.0	112.3	98.4	154.5	141.6	70.0	90.0	43.6	43.3	83.3	76.3
1899-1900	144.3	177.5	112.1	99.8	155.9	141.5	71.8	91.0	45.4	44.8	85.7	76.7
1900-1901	143.7	177.1	113.2	98.2	155.6	140.3	70.3	90.4	47.7	42.1	83.0	77.0
1901-2	144.7	177.4	115.0	101.2	155.1	144.3	71.9	91.7	48.5	43.8	84.7	82.4
1902-3[a]	147.2	178.5	118.0	105.6	158.9	146.3	71.8	92.3	49.0	43.9	83.6	85.3
1903-4[a]	146.7	176.5	117.2	107.9	156.0	147.9	72.1	92.0	50.0	44.7	82.9	90.0
1904-5[a]	150.9	179.0	122.9	107.6	160.9	157.5	74.0	94.9	50.2	43.8	85.8	97.7

[a] Subject to correction.

TABLE 10.—*Number and sex of teachers—Percentage of male teachers.*

State or Territory.	Whole number of different teachers employed.			Percentage of male teachers.				
	Men	Women.	Total.	1870–71	1879–80.	1899–00	1899–1900.	1904–5.
1	2	3	4	5	6	7	8	9
United States	110,532	349,737	460,269	41.0	42.8	34 5	29.9	24.0
North Atlantic Division	16,784	96,812	113,596	26.2	28.8	[illegible]	18.4	14 8
South Atlantic Division	17,512	35,752	53,264	63.8	62 5	4[illegible] 1	40.7	32.9
South Central Division	27,219	41,970	69,189	67.5	67 2	57.5	47.4	39 3
North Central Division	43,118	151,437	194,555	43.2	41.7	32 4	28 3	22.2
Western Division	5,899	23,766	29,665	45 0	[illegible]	31.1	24.7	19.7
North Atlantic Division:								
Maine	693	5,965	6,658	a 24 4	a 27.2	a 16.0	a 16.4	10 4
New Hampshire	208	2,208	2,416	15 0	16 8	9 8	8.9	8.6
Vermont	331	3,086	3,417	16.5	16 8	12 0	13.0	9.7
Massachusetts	1,192	12,657	13,849	12 7	13 2	9 8	8 8	8.6
Rhode Island	167	1,880	2,047	a 20.4	20 2	12.6	9.5	8.2
Connecticut	337	4,282	4,619	a 22 1	a 22 8	a 13.4	a 9.0	7.3
New York	4,709	34,372	39,081	22 9	20.0	16.9	14.9	12.0
New Jersey	1,119	8,038	9,157	32 5	28 5	18 4	12.9	12.2
Pennsylvania	8,028	24,324	32,352	42 8	45.5	34.2	32.0	24.8
South Atlantic Division:								
Delaware	166	741	897	a 29 9	a 46 6	a 31 0	25.3	17.4
Maryland	908	4,242	5,150	45.0	42 8	27.8	21.7	17.6
District of Columbia	189	1,289	1,478	8.2	7.8	13.0	13.1	12.8
Virginia	2,098	6,974	9,072	64.5	61 8	41.5	31.5	23.1
West Virginia	3,793	3,843	7,636	79.0	75 2	63.4	57.9	49.6
North Carolina	3 372	6,315	9 687	a 73.2	a 71 3	59 1	49.4	34.8
South Carolina	2,630	3,429	6,059	62 4	59.5	49 6	a 43 5	43.4
Georgia	3,435	6,925	10,360	71 4	a 65 2	53.3	44.0	33.2
Florida	b 931	b 1,994	b 2,925	a 65.7	61.6	48.0	36 9	b 31.8
South Central Division:								
Kentucky	c 4,513	c 5,936	c 10,449	a 66 0	64.6	49.8	45.5	c 43.2
Tennessee	4,117	5,667	9,784	a 75.0	74 4	61.8	a 54 0	42.1
Alabama	2,300	3,100	5,400	66.8	63 8	62.9	30.1	42.6
Mississippi	c 3,029	c 5,894	c 8,922	a 60.8	61 2	49 6	44.2	c 33.9
Louisiana	995	3,685	4,680	80 9	46 1	44 7	47.9	31.3
Texas	6,495	10,621	17,116	a 77 3	a 75 0	61 1	48.9	37 9
Arkansas	4,039	3,788	7,826	a 75.6	78 4	68.5	59 7	51.6
Oklahoma	1,269	2,418	3,687	..	..	..	42 8	34 4
Indian Territory	464	861	1,325	..	..	..	..	35.0
North Central Division:								
Ohio	8,866	17,603	26,469	43.2	47 8	43 1	40 4	33.5
Indiana	6,518	9,977	16,495	60.5	57 5	51 1	46 2	39 5
Illinois	6,137	21,723	27,860	43.5	30 7	32 5	28.4	22.0
Michigan	2,658	14,165	16,823	20.3	20 2	22 3	20.3	15.8
Wisconsin	1,939	12,065	14,004	a 28.8	28.9	19 8	18 4	13.8
Minnesota	1,772	11,548	13,320	33.7	35 9	23.9	19 4	13.3
Iowa	3,598	26,021	29,619	30 0	33 6	20.6	17 2	12.1
Missouri	5,235	12,150	17,385	65.3	58 1	44 4	37.6	30.1
North Dakota	1,274	4,440	5,714	a 24.7	a 40.8	28 3	28.8	22.3
South Dakota	980	4,170	5,150			29.0	24 4	19.0
Nebraska	1,310	8,370	9,680	51 9	40 7	27.1	21.8	13.6
Kansas	2,831	9 205	12,036	47 2	45.1	40 8	32.7	23.5
Western Division:								
Montana	c 210	c 1,052	c 1,208	a 60 3	38 5	22 9	16 6	c 17.0
Wyoming	83	645	728	a 28.6	44 3	22 4	15 6	11.4
Colorado	738	3,716	4,454	48 8	36 4	26.2	20 9	16.6
New Mexico	406	422	828	a 61 7	78.0	a 62.2	a 55.2	49.0
Arizona	97	441	538		47 5	38.8	27.3	18.0
Utah	b 553	b 1,165	b 1,718	55.0	54 5	46 6	36.5	b 32.2
Nevada	b 39	b 318	b 357	32 4	46.7	16 3	11 1	b 10.9
Idaho	410	1,137	1,547	a 64 3	57 4	a 33 4	31.2	26.5
Washington	1,228	3 951	5,179	a 46.5	37 4	40 6	28 9	23.7
Oregon	817	3,205	4,022	a 51 7	48 3	43 3	29 4	20.3
California	1,312	7,714	9,026	40.0	33.6	21.4	17.8	14.5

a Approximately. b In 1903–4. c In 1902–3.

TABLE 11.—*Teachers' wages—Number of schoolhouses—Value of school property—Private school enrollment.*

State or Territory.	Average monthly salaries of teachers.			Number of buildings used as schoolhouses. a	Estimated value of all public school property	Private schools.*		
	Men	Women.	Total			Number of pupils enrolled.	Total public and private enrollment.	Per cent of pupils in private schools
1	2	3	4	5	6	7	8	9
United States	b$55.04	b$42.69	$47.97	256,826	$733,446,805	1,347,000	17,815,300	7.56
N. Atlantic Div.	b 68.17	b 44.27	60.41	[illegible]	310,569,029	477,200	4,382,624	10.89
S. Atlantic Div.	b 42.30	b 33.65	34.75	38,618	33,023,964	121,600	2,444,340	4.97
S. Central Div.	46.13	37.71	40.91	52,135	37,280,665	177,900	3,499,752	5.08
N. Central Div.	54.60	42.08	45 40	107,900	287,592,556	594,800	6,428,072	7.95
Western Div.	b 60.75	b 53.98	56.92	15,190	64,980,591	65,700	1,060,312	6.20
N. Atlantic Div								
Maine	38.32	29.48	30.40	3,889	5,416,628	3,001	135,449	2.22
New Hampshire	c 51.19	c 34.31	c 35.76	1,804	4,493,361	11,863	89,785	13.21
Vermont	47.68	30.44	32.11	1,888	2,963,940	7,277	73,998	9.83
Massachusetts	149.05	57.22	65.12	d 4,289	58,894,058	93,973	591,877	15.88
Rhode Island	120.92	53.70	59.25	534	6,048,349	18,172	89,596	20.28
Connecticut	108.34	47.06	52.09	1,594	13 470,109	35,239	204,018	17.27
New York			83.56	12,005	126.188,508	206,026	1,519,134	13.69
New Jersey	103.02	54.46	61.90	1,986	22 094,076	c 47,453	c 370,028	e 12.82
Pennsylvania	51.81	39.14	42.22	14,994	71,000,000	f 48,704	f 1,248,934	f 3.90
S. Atlantic Div..								
Delaware	72.82	34.70	40.22	458	1,622,314			
Maryland			46.86	d 2,485	g 4 790 000			
Dist. Columbia	h 94.48	h 64.31	h 64.38	142	i 5 815,580	j 6,000	57,280	j 10.49
Virginia	h 34.56	h 27.20	h 29.13	7,159	4,297,653	jk 15,500	jk 391,100	jk 3.96
West Virginia			34.58	6,436	5,810 847	l 1,804	l 220,700	l 0.86
North Carolina			30.96	7,326	3,182,918	m 26,198	m 361 566	m 7 25
South Carolina			30.06	4,960	2,000,000			
Georgia			33.83	7,190	4,009,500	n 27.285	n 442,932	n 6.16
Florida	f 44.04	f 35.93	f 38.49	f 2,412	f 1,290 052	o 2,000	o 114,384	o 1.75
S. Central Div:								
Kentucky	o 50.90	o 39.18	o 44.24	h 8,561	g 6,117,962	h 17,480	h 518,982	h 3.37
Tennessee	f 39.00	f 34.00	f 36.18	6,885	5,171,753	18,500	526,923	3.51
Alabama	c 31.00	c 27.00	c 28.20	p 5,000	p 2,200,000	q 26,722	q 388,722	q 6.87
Mississippi	h 33.54	h 29.46	h 30.84	h 7,249	h 2,190,000	h 7,500	h 411,147	h 1.82
Louisiana	47.49	37.97	39.97	3,510	3,059,915	48,659	258,775	18.80
Texas	60.01	48.01	52.71	11,333	11,806,674			
Arkansas	45.50	34.35	40.10	5,511	3,171,361	9,548	345,313	6.87
Oklahoma	40.00	36.00	37.39	3,230	c 2,123,000			
Indian Territory	49.17	41.55	44.22	856	750,000	2,330	50,408	4.62
N. Central Div.:								
Ohio	h 45.00	h 40.00	h 41.79	13,155	52,807,880	f 23,569	f 859,176	f 2.74
Indiana	58.08	52.00	54.40	9,813	29,059,008	13,143	563,264	2.33
Illinois	72.14	56.90	60.26	12,919	64,554,813	147,199	1,132,333	13.00
Michigan	60.22	42.06	44.86	8,308	25,963,302	59,316	580,779	10.21
Wisconsin	f a 55.50	f a 35.26	f a 38.14	7,390	f 10,574,795	55 802	520,916	10.71
Minnesota	59.20	41 09	43.63	8,148	22,017,624	i 20.073	i 372,165	i 5.39
Iowa	48.52	[illegible]	37.58	13,993	23,304,616	f 50 534	f 596,474	f 8.47
Missouri	52.12	44.24	46.61	10,619	22,593,018	f 70,308	f 901,718	f 8.77
North Dakota	40.36	42.25	43.73	3,435	4,333,569	1,700	108,600	1.56
South Dakota	40.33	36.86	37.22	4,063	4,540,956	i 1,888	i 89,914	i 2.10
Nebraska	58.85	41.81	44.07	6,796	11,309,208			
Kansas	u 48.00	u 40.00	u 41 86	9,061	10,524,767			
Western Div.:								
Montana	h 76.89	h 52 04	h 56.27	h 734	h 4,832,614	h 1,839	h 46,720	h 3.94
Wyoming	75.00	48.00	51.08	c 524	c 453,807	350	18,695	1 87
Colorado	66.54	42.87	46.79	2,002	f 10,265,046	2,307	140,225	1.65
New Mexico			54.23	d 697	800 777	4,151	41,821	9 93
Arizona	87.07	73.02	75.56	df 498	900,201	1,656	23,448	7.06
Utah	f 77.43	f 54.39	f 61 61	f 693	f 3,537,772	f 2,814	f 79,345	f 3.55
Nevada	f 103.47	f 63.30	f 67.77	df 328	f 269,965	f 323	f 7,642	f 4.23
Idaho	67.47	54.70	58.09	1,017	1,892 055			
Washington	64.51	51 51	54 67	2,009	9,807,515	5,167	175,533	2.93
Oregon	f 54.22	f 42.05	f 44.60	2,228	4,670,979	6,066	114,102	5.32
California	80.00	64.50	66.84	3,860	27,550,660	f 37,226	f 336,204	f 11.07

* The reports of private schools are more or less incomplete, and the number of pupils as given may be taken to represent the minimum number of private pupils in the States furnishing this item. In forming the totals the States not reporting are estimated. a Including buildings rented. b Average for those States reporting salaries. c High-school teachers' wages not included. d Number of schools. e In 1899–1900. f In 1903–4. g Approximately. h In 1897–98. i Total cost of sites and buildings. j Estimated. k In 1902–3. l In 1893–94. m 1891–92. n In 1892–93. o In 1901–2. p Estimated by State Superintendent. q In 1898–99. r Estimated in 1904; returns incomplete. s Outside of cities. t In 1894–95. u Does not include cities of the first and second class.

TABLE 12.—*School moneys received.*

State or Territory.	Income of permanent school funds and rent of school lands.	From taxation.			From other sources, State and local.	Total revenue (excluding balances on hand and proceeds of bond sales).
		From State taxes.	From local taxes.	Total from taxation.		
1	2	3	4	5	6	7
United States	$13,194,042	$44,349,295	$210,167,770	$254,517,065	$34,107,962	$301,819,069
North Atlantic Division	557,347	14,709,579	86,340,077	101,049,736	18,957,798	120,464,881
South Atlantic Division	299,386	6,622,041	9,193,302	15,845,343	916,907	17,051,636
South Central Division	2,640,832	7,876,703	9,292,673	17,171,376	2,193,206	22,011,414
North Central Division	8,065,219	8,107,997	90,273,503	98,380,400	10,851,798	117,897,417
Western Division	1,035,258	7,091,785	15,068,415	22,070,210	1,288,253	24,393,721
North Atlantic Division.						
Maine	72,173	540,627	1,497,541	2,038,168	0	2,108,341
New Hampshire	37,239	25,000	1,226,054	1,261,054	62,038	1,360,331
Vermont	62,813	150,207	931,893	1,082,100	154,988	1,299,901
Massachusetts	(a)	377,421	17,508,144	17,885,565	245,964	18,131,529
Rhode Island	16,320	143,265	1,703,935	1,737,140	83,542	1,837,302
Connecticut	178,802	520,563	3,029,477	3,550,040	71,524	3,800,366
New York	(a)	4,538,160	32,716,464	37,254,764	11,611,531	48,866,035
New Jersey	200,000	3,033,891	6,546,011	9,579,902	13,960	9,773,562
Pennsylvania	0	5,400,855	21,280,358	26,687,413	9,014,051	23,207,464
South Atlantic Division.						
Delaware	0	150,736	338,788	488,524	0	488,524
Maryland	102,200	1,007,007	1,876,581	2,883,588	177,127	3,162,715
District of Columbia	0	0	b 1,690,327	1,690,327	0	1,690,327
Virginia	57,906	1,071,256	1,303,840	2,375,096	0	2,432,102
West Virginia	99,393	501,551	2,063,985	2,565,536	79,425	2,744,334
North Carolina	0	1,341,529	338,414	1,679,943	200,567	1,880,510
South Carolina	0	c 803,765	206,110	1,009,875	d 370,358	1,310,233
Georgia	(a)	1,591,441	701,720	2,293,161	103,200	2,396,761
Florida (1903–4)	30,787	175,750	653,757	829,513	85,640	946,140
South Central Division						
Kentucky (1902–3)	(a)	1,895,575	582,713	2,478,288	144,851	2,223,139
Tennessee	137,125	472,550	1,984,307	2,456,857	507,866	3,201,647
Alabama	162,315	879,248	447,000	1,326,248	100,000	1,588,561
Mississippi (1902–3)	187,746	c 1,250,000	290,668	1,540,668	124,576	1,856,990
Louisiana	81,412	579,091	c 1,219,055	1,798,146	339,354	2,218,912
Texas	1,811,359	2,408,727	1,763,109	4,171,836	293,103	6,406,298
Arkansas	0	503,514	c 1,379,604	1,973,118	68,817	2,041,935
Oklahoma	230,875	0	1,122,217	1,122,217	69,618	1,422,710
Indian Territory	0	0	198,000	198,000	444,032	642,032
North Central Division.						
Ohio	261,497	1,903,647	15,143,000	17,047,313	1,481,985	18,790,795
Indiana	662,480	1,831,654	8,777,015	10,608,669	685,901	11,957,050
Illinois	784,906	1,000,000	20,173,619	21,173,619	740,869	22,699,474
Michigan	2,326,776	0	6,502,423	6,502,423	928,872	9,740,071
Wisconsin	(a)	1,475,411	5,669,787	7,145,198	1,385,932	8,531,130
Minnesota	1,481,350	449,213	5,979,048	6,428,261	f 1,253,604	9,163,215
Iowa	807,491	0	9,216,784	9,216,784	1,080,080	11,104,355
Missouri	540,408	1,275,818	6,964,698	8,240,426	1,569,443	10,350,277
North Dakota	337,353	0	1,698,653	1,698,653	440,024	2,476,030
South Dakota	425,029	0	1,915,781	1,915,781	0	2,340,810
Nebraska	693,443	171,354	3,463,083	3,634,437	1,093,403	5,218,283
Kansas	435,229	0	4,818,836	4,818,836	252,065	5,506,327
Western Division.						
Montana (1902–3)	114,727	493,236	585,069	1,078,305	84,710	1,277,742
Wyoming	79,279	0	213,953	213,953	73,008	366,300
Colorado (1903–4)	182,321	0	3,560,287	3,560,287	429,986	4,172,494
New Mexico	(g)	h 220,717	(a)	220,717	c 146,924	367,641
Arizona	0	38,216	369,115	407,331	30,809	438,140
Utah (1903–4)	(a)	603,762	1,126,079	1,729,841	124,885	1,854,726
Nevada (1903–4)	126,303	14,019	97,314	111,333	33,139	270,775
Idaho	(i)	795,983	689,214	785,197	128,760	913,957
Washington	293,312	1,501,021	1,735,227	3,236,248	118,109	3,648,269
Oregon	239,316	0	1,695,439	1,695,439	117,963	2,052,718
California	(a)	k 4,234,241	5,036,618	9,270,859	(a)	9,270,859

a Included in State taxes.
b Includes United States appropriation.
c Includes poll tax.
d Includes "Dispensary funds."
e Not reported separately.
f Includes receipts from sale of bonds.
g Included, if any, in State taxes.
h Includes local taxes and income from rent of lands.
i Included in State apportionment.
j State apportionment.
k Includes taxes on railroads and collateral inheritances.

TABLE 13.—*The school revenue compared with the school population and the adult male population (21 years and upward); percentage analysis of the school revenue.*

State or Territory.	Amount raised for each person 5 to 18 years of age.	Amount raised per adult male.	Amount each adult male must contribute to provide $1 for each person 5 to 18 years of age.	Per cent of the whole revenue derived from—			
				Permanent funds and rents.	State taxes.	Local taxes.	Other sources.
1	2	3	4	5	6	7	8
United States	$12.89	$13.14	$1.02	4.37	14.69	69.64	11.30
North Atlantic Division	21.56	17.69	.82	.46	12.17	71.67	15.70
South Atlantic Division	4.77	6.35	1.33	1.60	39.01	53.91	5.39
South Central Division	4.32	5.90	1.37	12.04	35.78	42.22	9.96
North Central Division	14.74	14.51	.98	7.35	6.88	76.57	9.20
Western Division	21.19	15.01	.71	4.24	28.70	61.77	5.29
North Atlantic Division:							
Maine	12.89	9.46	.74	3.42	25.64	70.94	0.00
New Hampshire	14.69	9.96	.68	2.74	1.84	90.86	4.56
Vermont	15.80	11.71	.74	4.09	11.65	72.25	12.01
Massachusetts	26.42	19.51	.74	(a)	2.08	96.57	1.35
Rhode Island	16.64	13.17	.79	.89	7.80	86.75	4.56
Connecticut	16.75	12.44	.74	4.71	13.69	79.72	1.88
New York	25.85	20.57	.80	(a)	9.29	66.95	23.76
New Jersey	18.60	15.76	.85	2.05	30.83	66.98	.14
Pennsylvania	18.39	16.92	.92	0.00	16.22	63.92	19.86
South Atlantic Division:							
Delaware	9.75	8.84	.91	0.00	32.04	67.96	0.00
Maryland	8.99	9.27	1.03	3.23	31.84	59.33	5.60
District of Columbia	25.54	18.44	.72	0.00	0.00	[b] 100.00	0.00
Virginia	3.94	5.15	1.31	2.35	44.05	53.60	0.00
West Virginia	8.42	10.04	1.19	3.62	18.28	75.21	2.89
North Carolina	2.78	4.19	1.51	0.00	71.34	18.00	10.66
South Carolina	2.64	4.32	1.64	0.00	[c] 61.35	18.02	[d] 20.63
Georgia	3.03	4.48	1.48	(c)	66.40	29.27	4.33
Florida (1903–4)	5.20	6.14	1.17	3.25	18.59	69.09	9.07
South Central Division:							
Kentucky (1902–3)	3.94	4.81	1.22	(c)	62.26	32.42	5.32
Tennessee	4.52	5.99	1.33	4.42	15.24	63.97	16.37
Alabama	2.39	3.53	1.47	10.22	55.35	28.14	6.29
Mississippi (1902–3)	3.35	5.07	1.51	10.10	[c] 67.24	15.96	6.70
Louisiana	4.51	6.21	1.38	3.36	26.23	[c] 54.99	15.42
Texas	5.54	7.66	1.38	28.74	37.60	27.52	6.14
Arkansas	4.31	6.09	1.41	0.00	29.07	[c] 67.56	3.37
Oklahoma	8.17	9.34	1.14	16.58	0.00	78.55	4.87
Indian Territory	3.78	5.20	1.37	0.00	0.00	30.80	69.20
North Central Division:							
Ohio	16.25	14.34	.91	1.39	10.14	80.59	7.88
Indiana	16.09	15.55	.97	5.72	15.36	73.59	5.33
Illinois	15.50	14.68	.94	3.46	4.40	88.87	3.27
Michigan	14.11	12.84	.91	23.86	0.00	66.62	9.52
Wisconsin	12.74	13.69	1.08	(a)	17.29	66.47	16.24
Minnesota	15.82	16.06	1.02	16.17	4.90	65.25	[f] 13.68
Iowa	16.43	16.44	1.00	8.02	0.00	82.33	9.65
Missouri	10.50	11.28	1.07	5.23	12.35	67.42	15.00
North Dakota	21.21	21.30	1.00	13.86	0.00	67.70	18.44
South Dakota	17.67	19.50	1.10	18.16	0.00	81.84	0.00
Nebraska	16.29	17.34	1.07	9.39	3.29	66.37	20.95
Kansas	11.72	12.36	1.06	7.90	0.00	87.52	4.58
Western Division:							
Montana (1902–3)	20.68	10.99	.53	8.98	38.60	45.79	6.63
Wyoming	14.27	8.32	.58	21.63	0.00	58.42	19.95
Colorado (1903–4)	28.62	20.54	.72	4.37	0.00	85.33	10.30
New Mexico	5.64	6.13	1.09	(g)	[h] 60.02	(a)	39.98
Arizona	12.08	8.71	.72	0.00	8.72	84.25	7.03
Utah (1903–4)	16.76	22.49	1.34	(a)	24.40	68.05	7.55
Nevada (1903–4)	30.04	15.29	.51	46.64	5.18	35.94	12.24
Idaho	16.09	13.82	.86	(i)	[j] 10.50	75.41	14.09
Washington	24.10	16.14	.67	8.04	41.16	47.56	3.24
Oregon	16.57	12.48	.75	11.89	0.00	82.25	5.86
California	25.05	15.61	.62	(e)	[k] 45.67	54.33	(e)

[a] Included in State taxes.
[b] Includes United States appropriation.
[c] Includes poll tax.
[d] Includes "Dispensary fund."
[e] Not reported separately.
[f] Includes receipts from sale of bonds.
[g] Included, if any, in State taxes.
[h] Includes local taxes and income from rent of lands.
[i] Included in State apportionment.
[j] State apportionment.
[k] Includes taxes on railroads and collateral inheritances.

TABLE 14.—*Progress of school expenditure.*

State or Territory.	Total amount expended for schools.					Expended per capita of total population.				
	1870–71.	1879–80.	1889–90.	1899–1900.	1904–5.	1870–71.	1879–80.	1889–90.	1899–1900.	1904–5.
1	2	3	4	5	6	7	8	9	10	11
United States	$69,107,612	$78,094,687	$140,506,715	$214,964,618	$291,616,660	$1 75	$1 50	$2 24	$2 84	$3 53
N. Atlantic Div.	20,796,838	28,538,058	48,023,492	83,910,564	114,092,258	2 38	1 97	2 70	3 99	4 99
S. Atlantic Div	3,781,581	5,130,492	8,767,185	12,921,707	16,535,292	63	.68	.99	1 24	1 50
S. Central Div.	4,854,834	4,872,829	10,678,680	14,753,810	21,868,060	73	.55	97	1 08	1 40
N. Central Div.	28,430,033	35,285,635	62,823,563	86,165,827	114,722,345	2 14	2 03	2 81	3 27	4 04
Western Div.	2,244,329	4,267,673	10,213,815	17,212,614	24,298,705	2 15	2 41	3 37	4 21	5 34
N. Atlantic Div.:										
Maine	950,662	1,067,991	1,327,553	1,712,705	2,020,348	1 51	1 65	2 01	2 47	2 84
N. Hampshire	418,545	565,339	844,333	1,052,202	1,557,061	1 30	1 63	2 24	2 56	3 63
Vermont	499,901	446,217	711,072	1,074,222	1,324,507	1 51	1 34	2 14	3 13	3 79
Massachusetts	5,579,363	4,963,900	8,286,062	13,826,243	18,131,529	3 73	2 80	3 70	4 93	5 87
Rhode Island	461,160	526,112	884,996	1,548,675	1,987,750	2 05	1 90	2 56	3 61	4 23
Connecticut	1,496,981	1,408,375	2,167,014	3,129,249	3,779,732	2 74	2 26	2 89	3 51	3 82
New York	9,607,904	10,296,977	17,543,880	33,421,491	47,227,428	2 17	2 03	2 92	4 60	5 98
New Jersey	2,302,341	1,873,465	3,340,190	6,608,692	9,596,446	2 48	1 66	2 31	3 51	4 56
Pennsylvania	8,479,918	7,369,682	12,928,422	21,476,995	28,465,457	2 36	1 72	2 46	3 41	4 17
S. Atlantic Div.:										
Delaware	153,509	207,281	a 275,000	453,670	539 857	1 21	1 41	a1.63	2 46	2 80
Maryland	1,214,729	1,544,367	1,910,663	2,803,032	2,961,373	1 53	1 65	1 83	2 36	2 35
Dist. Columbia	373,535	438,567	905,777	1,076,620	1,076,259	2 77	2 47	3 93	3 86	5 53
Virginia	587,472	946,109	1,604,509	1,980,238	2,377,624	47	.63	.97	1 07	1 22
W. Virginia	577,719	707 563	1,198,493	2,009,123	2 760,817	1.26	1.14	1.57	2 10	2.62
N. Carolina	177,496	376,062	714 900	950,317	1,935 982	16	.27	.44	.50	.95
S. Carolina	275,688	324,629	450,930	894,004	1,304,630	38	.33	.39	67	.91
Georgia	202,000	471,029	1,190,354	1,980,018	2,327,003	.24	.31	.65	.89	.98
Florida	129,431	114,805	516,533	785,777	b 945,047	66	.43	1.32	1.45	b1.62
S. Central Div.:										
Kentucky	a 1,075,000	1,009,030	2,140,678	3,037,006	c 2,662 563	b 80	.65	1.15	1.41	{(a c) 1 19
Tennessee	a 758,000	744,180	1,526,241	1,751,047	2,933,289	a .59	.48	.86	.87	1 27
Alabama	a 370,000	a 500,000	a 800,000	923,464	1,475,000	a .36	a .40	a .59	.59	74
Mississippi	950,000	830,705	1,109,575	1,365,112	c 1,808,544	1.11	.73	.88	.89	c1.15
Louisiana	531,834	411,858	817,110	1,135,125	2,169,001	.71	44	.73	.82	1.42
Texas	a 650,000	a 1,030,000	3,178,300	4,465,255	6,400,492	a .74	a .65	1.42	1.46	1.88
Arkansas	a 520,000	287,056	1,016,776	1,309,810	1,955,428	a1.02	.36	.90	1 04	1.30
Oklahoma	.....	.....	.. ..	686,096	1,488,111	.. ..	..	...	1.72	2 67
Indian Ter.	....	.....	....	.. .. ..	715,332	...	.	. ...	....	1.44
N. Central Div.										
Ohio	6,831,035	7,166,963	10,602,238	13,335,211	17,595,091	3.52	2.24	2 89	3 21	4.00
Indiana	a 2,897,537	4,491,850	5,245,216	8,182,526	11,501,001	a 1.70	2.27	2.39	3.25	4.29
Illinois	6,656 542	7,014,092	11,645,126	17,757,145	22,823,191	2.57	2 28	3.04	3.68	4.29
Michigan	2,840,730	2 775,917	5,349,360	7,297,601	9,630,696	2 33	1 70	2.55	3.01	3.77
Wisconsin	1.932,530	2 177,033	3,801,212	5,463,370	8 240,352	1 70	1 65	2.25	2 65	3 65
Minnesota	960,558	1,328,429	4,187,310	5,630,013	8,469,902	2.06	1.70	3 22	3.21	4 30
Iowa	3,269,190	4,484,043	6,382,953	8,496,522	10,316,292	2.70	2 78	3 34	3.81	4.31
Missouri	1,749,049	2,675,364	5,434,262	7,816,050	10,101,923	.99	1 23	2 03	2 52	3.04
N. Dakota	a 23,000	245,000	626,949	1,526,090	2,529,914	a1 29	1 81	{3 43	4.78	6 60
S. Dakota			1,199,630	1,605,623	2,379,775			{3 65	4 00	5 56
Nebraska	365,529	1,106,617	3,376,332	4,403,222	5,304,292	2.61	2.45	3.19	4.13	4.97
Kansas	904,323	1,818,337	4,972,967	4,622,364	5,829,916	2.24	1 83	3 48	3 14	3.66
Western Div.:										
Montana	a 35,600	78,730	304,984	923,310	c 1,236,253	a 1.62	2 01	2.76	3.79	c4.46
Wyoming	a 7,000	28,504	a 225,000	253,551	387,681	a .71	1.37	a3.71	2.74	3.61
Colorado	67,395	395,227	1,681,379	2,793,648	b 3,984,967	1.44	2 03	4 08	5 18	b6.75
N. Mexico	a 4,900	28,973	a 85,000	343,429	402,225	a .05	.24	a .55	1 76	1.70
Arizona	0	61,172	181,914	299,730	457,354	.	1.51	3 05	2 44	3.26
Utah	a 117,000	132,194	394,685	1,094 757	b 1,657,234	a 1 28	.92	1 90	3.96	b5.47
Nevada	a 65,000	220,245	161,481	224 622	b 257,501	a 1 93	3.54	3.53	5 30	b6.08
Idaho	19,003	38,411	169,020	400,043	912,272	1 17	1 18	2 00	2 47	4.60
Washington	a 35,000	112,615	958,111	2,375,753	3,220,340	a1.30	1.50	2.74	4.59	5.38
Oregon	a 160,000	307,031	805,979	1,594,420	2,052,175	a1 65	1.76	2.57	3.86	4.45
California	1.713,431	2,864,571	5,187,162	6,909,351	9,770,703	2 93	3.31	4.29	4.65	6.03

a Approximately.
b In 1903–4.
c In 1902–3

TABLE 15.—*The school expenditure of 1904–5 classified.*

State or Territory.	Paid for sites, buildings, furniture, libraries, and apparatus.	Paid for teachers' and superintendents' salaries.	Paid for all other purposes, principally maintenance.	Total expenditure, excluding payments of bonds.
1	2	3	4	5
United States	$50,416,168	$177,462,981	$57,737,511	$291,616,660
North Atlantic Division	27,758,760	62,205,896	24,127,602	114,092,258
South Atlantic Division	1,875,377	12,461,763	2,496,152	16,835,292
South Central Division	2,297,279	17,183,092	2,187,689	21,668,060
North Central Division	19,745,121	70,313,033	24,664,191	114,722,345
Western Division	4,739,631	15,299,197	4,259,877	24,298,705
North Atlantic Division				
Maine	343,714	[a] 1,293,608	383,026	2,020,348
New Hampshire	352,805	822,380	381,870	1,557,061
Vermont	327,677	747,899	248,931	1,324,507
Massachusetts	4,944,876	9,921,509	[b] 3,265,144	18,131,529
Rhode Island	403,377	1,195,515	388,858	1,987,750
Connecticut	557,172	2,330,683	901,877	3,779,732
New York	13,401,238	26,562,987	7,203 203	47,227,428
New Jersey	2,006,635	5,908,838	2,382,973	9,598,446
Pennsylvania	5,361,266	14,132,471	8,971,720	28,465,457
South Atlantic Division:				
Delaware	[c]	341,576	198,381	539,957
Maryland	187,790	2,317,011	456,572	2,961,373
District of Columbia	281,039	1,092,705	302,515	1,676,259
Virginia	278,982	1,804,271	294,371	2,377,624
West Virginia	419,748	1,633,456	713,613	2,766,817
North Carolina	296,892	1,430,204	208,886	1,935,982
South Carolina	140,109	1,089,280	75,181	1,304,630
Georgia	162,722	2,043,871	121,010	2,327,603
Florida (1903-4)	108,035	709,399	127,623	945,047
South Central Division.				
Kentucky (1902-3)	295,655	2,219,178	148,030	2,662,863
Tennessee	261,529	2,173,866	497,894	2,933,289
Alabama	[d]	1,375,000	[e] 100,000	1,475,000
Mississippi (1902-3)	54,007	1,573,416	241,121	1,868,544
Louisiana	419,852	1,496,615	253,534	2,169,001
Texas	705,941	5,221,427	473,124	6,400,492
Arkansas	205,103	1,657,878	92,447	1,955,428
Oklahoma	217,292	996,612	274,207	1,488,111
Indian Territory	137,900	470,100	107,332	715,332
North Central Division				
Ohio	1,540,115	11,178,624	4,576,352	17,595,091
Indiana	1,005,178	6,844,421	3,051 402	11,501,001
Illinois	[a] 4,580,137	13,416,000	4,827,054	22,823,191
Michigan	1 480 062	6,007,653	2,142,981	9,630 696
Wisconsin	1,490,273	5,121,781	1,619,298	8,240,352
Minnesota	1,754,248	5,251,803	1,463,851	8,469,902
Iowa	878,291	6,745,416	2,692,585	10,316,292
Missouri	[a] 2,419 168	5,964,024	1,718,731	10,101,923
North Dakota	547,741	1,349,221	632 952	2,529,914
South Dakota	227,281	1,312,761	839 733	2,379,775
Nebraska	1,361,707	3,265,836	676,749	5,304,292
Kansas	1,551 920	3,855,493	[f] 422,503	5,829,916
Western Division				
Montana (1902-3)	307,131	651,738	217,384	1,236,253
Wyoming	83,280	260,379	44,022	387,681
Colorado (1903-4)	587,010	2,288,749	1,109,199	3,984,957
New Mexico	64,361	238,413	59,451	362,225
Arizona	31,252	401,548	24,554	457,354
Utah (1903-4)	330,221	831 244	495,769	1,657,234
Nevada (1903-4)	36 527	95,584	[g] 125,390	257,501
Idaho	224,522	560,490	127,260	912,272
Washington	1,003,940	2,153,109	63,291	3,220,340
Oregon	409,819	1,270,660	311,670	2,052,175
California	1,841,559	6,547,257	1,681,887	9,770,703

[a] Includes janitors' wages.
[b] Includes furniture, libraries, etc.
[c] Included in column 4.
[d] Not reported separately.
[e] Estimated by State superintendent.
[f] Includes bonded indebtedness paid.
[g] Includes some unclassified expenditures.

TABLE 16.—*(1) Expenditure per pupil (based on average attendance); (2) average daily expenditure per pupil; (3) percentage analysis of school expenditure.*

State or Territory.	Expenditure per capita of average attendance.				Average daily expenditure per pupil.		Per cent of total expenditure devoted to—		
	For sites, buildings, etc.	For salaries.	For all other purposes.	Total per pupil.	For salaries only.	Total.	Sites, buildings, etc.	Salaries.	All other purposes.
1	2	3	4	5	6	7	8	9	10
					Cents.	*Cents.*			
United States	$4.91	$15.46	$5.03	$25.40	10.2	16.8	19.3	60.9	19.8
North Atlantic Division	9.37	20.99	8.14	38.50	11.7	21.5	24.3	54.5	21.2
South Atlantic Division	1.29	8.54	1.71	11.54	7.0	9.4	11.1	74.0	14.9
South Central Division	1.11	8.28	1.05	10.44	7.6	9.7	10.6	79.3	10.1
North Central Division	4.62	16.47	5.78	26.87	10.2	16.7	17.2	61.3	21.5
Western Division	6.64	21.43	5.96	34.03	13.6	21.6	19.5	62.9	17.6
North Atlantic Division:									
Maine	3.51	[a]13.22	3.92	20.65	9.5	14.9	17.0	[a]64.0	19.0
New Hampshire	7.07	16.49	7.66	31.22	10.8	20.5	22.7	52.8	24.5
Vermont	6.77	15.47	5.15	27.39	9.9	17.4	24.7	56.5	18.8
Massachusetts	12.24	24.55	[b]8.08	44.87	13.1	24.0	27.3	54.7	[b]18.0
Rhode Island	7.49	22.21	7.22	36.92	11.4	19.0	20.3	60.1	19.6
Connecticut	4.32	17.97	6.98	29.27	9.6	15.6	14.8	61.4	23.8
New York	13.51	26.68	7.23	47.40	14.2	25.2	28.5	56.2	15.3
New Jersey	7.90	20.50	9.38	37.78	10.9	20.1	20.9	54.3	24.8
Pennsylvania	5.76	15.20	9.64	30.60	9.1	18.3	18.8	49.7	31.5
South Atlantic Division:									
Delaware (1899–1900)	[c]3.13	[c]11.05	[c]3.75	[c]17.93	[c]6.5	[c]10.5	17.5	61.6	20.9
Maryland	1.35	16.68	3.29	21.32	8.7	11.1	6.3	78.3	15.4
District of Columbia	6.92	26.91	7.45	41.28	14.9	22.8	16.8	65.2	18.0
Virginia	1.30	8.28	1.37	11.05	6.5	8.6	11.7	75.9	12.4
West Virginia	2.57	10.02	4.38	16.97	8.1	13.8	15.2	59.0	25.8
North Carolina	1.06	5.10	.74	6.90	5.4	7.3	15.3	73.9	10.8
South Carolina	.70	5.43	.38	6.51	5.1	6.2	10.7	83.5	5.8
Georgia	.52	6.56	.39	7.47	5.6	6.3	7.0	87.8	5.2
Florida (1903–4)	1.29	8.48	1.53	11.30	7.9	10.5	11.4	75.1	13.5
South Central Division:									
Kentucky (1902–3)	.95	7.16	.48	8.59	8.0	9.5	11.1	83.3	5.6
Tennessee	.75	6.23	1.43	8.41	5.5	7.4	8.9	74.1	17.0
Alabama	[d]	6.55	.48	7.03	6.4	6.9	[d]	93.2	6.8
Mississippi (1902–3)	.23	6.75	1.03	8.01	5.5	6.5	2.9	84.2	12.9
Louisiana	2.87	10.23	1.73	14.83	7.9	11.4	19.4	68.9	11.7
Texas	1.41	10.41	.94	12.76	9.3	11.4	11.0	81.6	7.4
Arkansas	.99	7.99	.45	9.43	9.1	10.7	10.5	84.8	4.7
Oklahoma	2.41	11.04	3.04	16.49	10.6	15.9	14.6	67.0	18.4
Indian Territory [e]	4.84	10.49	3.77	25.10	14.3	21.8	19.3	65.7	15.0
North Central Division:									
Ohio	2.95	17.92	7.34	28.21	11.2	17.6	10.5	63.5	26.0
Indiana	3.86	16.47	7.34	27.67	10.3	17.3	14.0	59.5	26.5
Illinois	5.64	16.52	5.95	28.11	9.8	16.6	20.1	58.8	21.1
Michigan	3.63	14.72	5.25	23.60	8.8	14.0	15.4	62.4	22.2
Wisconsin	5.15	17.62	5.57	28.34	10.4	16.8	17.3	61.5	21.2
Minnesota	6.25	18.72	5.22	30.19	11.6	18.7	20.7	62.0	17.3
Iowa	2.34	17.96	7.17	27.47	11.2	17.2	8.5	65.4	26.1
Missouri	5.14	12.67	3.65	21.46	8.3	14.1	24.0	59.0	17.0
North Dakota	8.07	19.88	9.32	37.27	14.1	26.4	21.7	53.3	25.0
South Dakota	3.02	17.44	11.15	31.61	12.5	22.6	9.5	55.2	35.3
Nebraska	7.35	17.64	3.65	28.64	10.4	16.8	25.7	61.6	12.7
Kansas	5.88	14.60	[f]1.60	22.08	10.1	15.2	26.6	66.1	[f]7.3
Western Division:									
Montana (1902–3)	11.66	20.71	6.91	39.28	[c]19.4	[c]36.7	29.7	52.7	17.6
Wyoming	6.83	21.34	3.61	31.78	15.2	22.7	21.5	67.2	11.3
Colorado (1903–4)	6.17	24.06	11.66	41.89	15.2	26.4	14.7	57.4	27.9
New Mexico	2.50	9.28	2.31	14.09	8.1	12.4	17.8	65.8	16.4
Arizona	2.24	28.68	1.75	32.67	21.2	24.1	6.8	87.8	5.4
Utah (1903–4)	5.88	14.80	8.82	29.50	9.7	19.3	19.9	50.2	29.9
Nevada (1903–4)	7.05	18.44	[g]24.20	49.69	11.6	31.3	14.2	37.1	[g]48.7
Idaho	5.51	13.76	3.12	22.39	10.1	16.5	24.6	61.4	14.0
Washington	8.45	18.11	.53	27.09	10.8	16.2	31.2	66.9	1.9
Oregon	6.01	16.27	3.99	26.27	10.3	16.6	22.9	61.9	15.2
California	6.44	27.34	7.02	40.80	16.1	24.0	15.8	67.0	17.2

[a] Includes janitors' wages.
[b] Includes furniture, libraries, etc.
[c] Approximately.
[d] Not reported separately.
[e] Returns imperfect.
[f] Includes bonded indebtedness paid.
[g] Includes some unclassified expenditures.

TABLE 17.—*Amount expended for common schools each year since 1869–70.*

Year.	Expended for—			Total expenditure.
	Sites, buildings, furniture, etc.	Teachers' and superintendents' salaries.	All other purposes.	
1869-70		$37,932,566		$63,396,666
1870-71		42,590,853		69,107,612
1871-72		46,935,681		74,234,476
1872-73		47,932,060		76,238,464
1873-74		50,785,656		80,054,286
1874-75		54,722,250		83,504,007
1875-76		55,358,160		83,082,578
1876-77		54,973,770		79,439,626
1877-78		56,155,133		79,063,260
1878-79		54,639,731		76,192,375
1879-80		55,942,972		78,094,687
1880-81		58,012,463		83,642,964
1881-82		60,594,033		88,990,466
1882-83		64,798,850		96,750,093
1883-84		68,384,275		103,212,837
1884-85		72,878,993		110,328,375
1885-86		76,270,434		113,322,545
1886-87		78,630,964		115,783,890
1887-88		83,022,562		124,244,911
1888-89	$23,305,624	87,568,300		132,539,783
1889-90	26,207,041	91,836,484	$22,463,190	140,506,715
1890-91	26,446,047	96,333,000	24,705,663	147,494,809
1891-92	29,344,559	100,228,250	26,174,197	155,817,012
1892-93	30,204,130	104,560,339	29,316,588	164,171,057
1893-94	30,007,688	109,302,405	33,292,750	172,502,843
1894-95	29,436,940	113,872,388	32,490,951	175,800,279
1895-96	32,590,112	117,139,841	33,760,012	183,498,965
1896-97	32,376,476	119,310,503	35,995,290	187,682,269
1897-98	31,413,233	124,192,270	38,685,408	194,292,911
1898-99	31,220,308	130,345,873	39,570,416	200,154,597
1899-1900	35,450,830	137,687,746	41,820,052	214,964,618
1900-1901	39,872,278	143,378,507	44,272,042	227,522,827
1901-2	39,962,863	151,443,681	46,855,755	238,262,299
1902-3a	46,289,074	157,110,108	48,058,443	251,457,625
1903-4a	49,453,209	167,824,753	56,938,205	273,216,227
1904-5a	50,436,168	177,462,981	57,737,511	291,616,660

a Subject to correction.

TABLE 18.—*(1) School expenditure per capita of population; (2) Same per capita of average attendance.*

Year.	Expended per capita of population.						Expended per pupil.					
	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.	United States.	North Atlantic Division.	South Atlantic Division.	South Central Division.	North Central Division.	Western Division.
1870 71	$1.75	$2.38	$0.63	$0.73	$2.14	$2.15	$15.20	$18.31	$10.27	$9.06	$14.87	$21.87
1871 72	1.83	2.40	.65	.81	2.31	2.27	15.93	18.86	10.46	9.08	16.36	23.57
1872 73	1.84	2.44	.65	.74	2.31	2.42	16.06	19.59	9.25	8.39	16.53	25.04
1873 74	1.86	2.51	.76	.66	2.36	2.40	15.85	19.69	9.01	7.55	16.57	24.36
1874 75	1.91	2.55	.80	.73	2.36	2.76	15.91	20.17	8.96	7.51	16.69	26.65
1875 76	1.85	2.45	.79	.55	2.37	2.78	15.70	19.14	8.65	6.70	16.91	26.35
1876 77	1.72	2.29	.72	.51	2.21	2.61	14.64	17.89	7.68	6.25	15.93	24.69
1877 78	1.67	2.15	.70	.50	2.14	2.73	13.67	16.55	7.21	5.96	15.08	25.82
1878 79	1.70	2.63	.63	.55	2.00	2.53	12.97	16.05	6.76	5.65	14.22	23.39
1879 80	1.56	1.97	.65	.55	2.03	2.41	12.71	15.64	6.60	5.40	14.30	22.59
1880 81	1.63	2.06	.72	.55	2.09	2.54	13.91	17.14	7.22	5.72	15.19	23.81
1881 82	1.70	2.11	.78	.64	2.19	2.59	14.05	17.35	7.63	6.25	15.79	24.32
1882 83	1.80	2.22	.92	.68	2.34	2.74	14.55	18.17	7.46	6.17	15.69	25.29
1883 84	1.88	2.25	.84	.74	2.45	2.83	14.63	18.37	7.44	6.26	16.90	24.69
1884 85	1.96	2.38	.88	.82	2.53	2.90	15.12	19.19	7.32	6.74	17.53	26.31
1885 86	1.97	2.39	.88	.87	2.54	2.88	15.06	19.11	7.33	6.93	17.45	25.52
1886 87	1.97	2.37	.90	.87	2.55	2.76	15.07	19.38	7.33	6.88	17.45	24.85
1887 88	2.07	2.48	.95	.87	2.68	2.96	15.71	20.60	7.61	6.60	18.29	27.38
1888 89	2.17	2.59	.96	.94	2.76	3.28	16.55	21.64	7.77	7.12	19.30	29.37
1889 90	2.24	2.76	.90	.97	2.81	3.37	17.23	23.58	7.76	7.28	19.70	30.57
1890 91	2.31	2.78	1.06	1.04	2.85	3.91	17.54	23.66	8.52	7.78	19.42	33.42
1891 92	2.40	2.90	1.06	1.07	2.94	4.20	18.20	24.89	8.74	7.82	20.13	33.55
1892 93	2.48	3.02	1.09	1.06	3.06	4.20	18.56	25.01	8.65	7.72	20.62	33.57
1893 94	2.55	3.13	1.12	1.09	3.23	3.77	18.62	26.21	8.61	7.58	21.29	29.06
1894 95	2.55	3.28	1.11	1.09	3.13	3.67	18.41	26.84	8.56	7.69	20.26	27.32
1895 96	2.62	3.49	1.13	1.10	3.12	3.73	18.70	28.45	8.87	7.60	20.09	27.16
1896 97	2.63	3.65	1.17	1.04	3.06	3.56	18.67	28.77	9.32	7.09	19.75	25.86
1897 98	2.67	3.75	1.19	1.03	3.07	3.81	18.76	29.34	8.97	7.09	19.47	28.29
1898 99	2.70	3.71	1.24	1.04	3.15	3.84	19.38	29.28	9.96	7.17	20.62	28.50
1899 1900	2.84	3.99	1.24	1.08	3.27	4.21	20.21	31.82	9.61	7.32	21.12	30.98
1900 1901	2.94	4.20	1.28	1.10	3.38	4.25	21.23	33.70	9.53	7.78	22.46	30.93
1901 2	3.03	4.22	1.33	1.16	3.52	4.62	21.53	33.39	9.91	8.16	22.63	32.26
1902 3 *a*	3.15	4.44	1.34	1.22	3.61	4.80	22.75	35.19	10.17	8.92	23.98	32.85
1903 4 *a*	3.36	4.68	1.44	1.30	3.85	5.44	24.14	36.75	10.57	9.58	25.70	35.66
1904 5 *a*	3.53	4.69	1.70	1.40	4.04	5.34	25.40	35.50	11.54	10.44	26.57	34.03

a Subject to correction.

TABLE 19.—*Wealth and school expenditure, 1880 and 1890.*

State or Territory.	True valuation of real and personal property.[a]		Expenditure for public schools (excluding debt paid).		Expended for public schools on each $100 of true valuation of all real and personal property.	
	1880.	1890.	1880.	1890.	1880.	1890.
					Cents.	*Cents.*
United States	$43,642,000,000	$64,829,040,611	$78,094,687	$140,506,715	17.9	21.7
North Atlantic Division	17,533,000,000	21,435,491,864	28,538,058	48,023,493	16.3	22.4
South Atlantic Division	3,759,000,000	5,132,980,606	5,130,492	8,767,165	13.6	17.1
South Central Division	3,882,000,000	6,193,230,433	4,872,829	10,678,680	12.6	17.2
North Central Division	16,186,000,000	25,255,945,549	35,285,635	62,823,563	21.8	24.9
Western Division	2,282,000,000	6,811,422,099	4,267,673	10,213,815	18.7	15.0
North Atlantic Division:						
Maine	511,000,000	480,134,128	1,067,991	1,327,553	20.9	27.1
New Hampshire	363,000,000	325,128,740	585,339	[b]844,333	15.6	26.0
Vermont	302,000,000	265,567,323	446,217	711,072	14.8	26.8
Massachusetts	2,623,000,000	2,803,645,447	4,983,900	8,280,002	18.9	29.6
Rhode Island	400,000,000	504,162,352	526,112	884,966	13.2	17.6
Connecticut	779,000,000	835,120,219	1,408,375	2,157,014	18.1	25.8
New York	6,308,000,000	8,576,701,991	10,296,977	17,543,880	16.3	20.5
New Jersey	1,305,000,000	1,445,285,114	1,873,465	[c]3,340,190	14.4	23.1
Pennsylvania	4,942,000,000	6,190,746,550	7,369,682	12,928,422	14.9	20.9
South Atlantic Division:						
Delaware	136,000,000	175,678,795	207,281	275,000	15.2	15.7
Maryland	837,000,000	1,085,473,048	1,544,367	1,910,603	18.5	17.6
District of Columbia	220,000,000	343,596,733	438,567	905,777	19.9	20.4
Virginia	707,000,000	862,318,070	946,109	1,604,509	13.4	18.6
West Virginia	350,000,000	638,954,881	707,553	1,198,493	20.2	27.3
North Carolina	461,000,000	584,148,999	376,062	714,900	8.2	12.2
South Carolina	322,000,000	400,911,303	324,629	450,936	10.1	11.2
Georgia	606,000,000	852,409,449	471,029	1,190,354	7.8	14.0
Florida	120,000,000	389,499,388	114,895	510,533	9.6	13.3
South Central Division:						
Kentucky	902,000,000	1,172,232,313	1,069,030	2,140,678	11.9	18.3
Tennessee	705,000,000	887,956,143	744,180	1,526,241	10.6	17.2
Alabama	428,000,000	622,773,504	500,000	890,000	11.7	14.3
Mississippi	354,000,000	454,242,068	830,705	1,109,575	23.5	24.4
Louisiana	392,000,000	495,301,607	411,858	817,110	10.8	16.5
Texas	625,000,000	2,105,576,766	1,030,000	3,178,300	12.5	15.1
Arkansas	286,000,000	455,147,422	287,056	1,016,776	10.0	22.3
Oklahoma	.....	.....	.....	.....	.....	.....
Indian Territory	.....	.....	.....	.....	.....	.....
North Central Division:						
Ohio	3,236,000,000	3,951,382,384	7,161,903	10,602,238	22.1	26.8
Indiana	1,681,000,000	2,095,176,626	4,491,850	5,245,218	26.7	25.0
Illinois	3,210,000,000	5,066,751,719	7,014,092	11,645,126	21.9	23.0
Michigan	1,580,000,000	2,095,016,272	2,775,917	5,349,356	17.6	25.5
Wisconsin	1,139,000,000	1,833,308,523	2,177,023	3,801,212	19.1	20.7
Minnesota	792,000,000	1,991,851,927	1,328,429	4,187,310	16.8	24.7
Iowa	1,721,000,000	2,287,348,333	4,494,043	6,382,953	26.1	27.9
Missouri	1,562,000,000	2,307,902,945	2,675,364	5,434,262	17.1	22.7
North Dakota	118,000,000	337,006,506	245,000	626,949	20.8	18.6
South Dakota		425,141,299		1,199,630		28.2
Nebraska	385,000,000	1,275,685,514	1,108,617	2,376,332	28.8	26.5
Kansas	760,000,000	1,799,343,501	1,818,337	4,972,967	23.9	27.6
Western Division:						
Montana	40,000,000	453,135,209	78,730	364,084	19.7	8.0
Wyoming	64,000,000	169,773,710	28,505	225,000	5.3	13.3
Colorado	240,000,000	1,145,712,267	365,227	1,661,379	16.5	14.7
New Mexico	49,000,000	231,459,897	28,973	85,000	5.9	3.7
Arizona	41,000,000	188,880,976	61,172	181,914	14.9	9.6
Utah	114,000,000	349,411,234	132,194	394,685	11.6	11.3
Nevada	156,000,000	180,323,668	220,245	161,481	14.1	9.0
Idaho	29,000,000	207,896,591	38,411	169,020	13.2	8.1
Washington	62,000,000	760,698,726	112,615	958,111	18.2	12.6
Oregon	154,000,000	590,306,194	307,031	806,979	19.9	13.7
California	1,343,000,000	2,533,733,627	2,864,571	5,187,162	21.3	20.5

[a] From United States census reports. [b] Includes debt paid, if any. [c] Amount of revenue.

TABLE 20.—*Wealth and school expenditure, 1900 and 1904.*

State or Territory.	True valuation of real and personal property.[a]		Expenditure for public schools (excluding debt paid).		Expended for public schools on each $100 of true valuation of all real and personal property.	
	1900.	1904.	1900.	1904.	1900.	1904.
					Cents.	*Cents.*
United States	$68,517,306,775	$107,104,211,917	$214,964,618	$273,216,227	24.3	25.5
North Atlantic Division	22,306,492,253	38,301,608,078	83,010,584	105,332,830	26.9	27.5
South Atlantic Division	6,679,120,048	7,936,862,961	12,921,797	15,997,956	19.4	20.0
South Central Division	8,207,174,377	10,052,467,528	14,753,816	19,870,733	[b]18.0	19.8
North Central Division	33,446,949,305	40,921,672,079	88,185,927	107,663,687	26.3	26.4
Western Division	7,877,510,712	9,992,581,271	17,212,614	24,441,012	21.8	24.5
North Atlantic Division:						
Maine	642,137,741	775,022,722	1,712,795	2,090,109	25.1	26.8
New Hampshire	472,145,849	516,999,504	1,072,262	1,376,899	22.3	26.6
Vermont	329,916,806	360,330,089	1,074,222	1,176,764	32.6	32.6
Massachusetts	4,344,903,955	4,968,578,913	13,836,243	16,436,668	31.7	33.2
Rhode Island	719,564,856	799,349,601	1,548,675	1,801,702	21.9	22.6
Connecticut	1,198,753,757	1,414,635,663	3,149,249	3,795,269	26.6	26.8
New York	12,505,330,137	14,769,012,307	33,421,491	43,750,277	26.7	29.8
New Jersey	2,733,745,134	3,235,619,973	6,608,602	8,884,515	24.2	27.3
Pennsylvania	9,815,140,116	11,173,630,396	21,176,905	30,073,365	23.1	22.7
South Atlantic Division:						
Delaware	211,711,483	230,269,976	453,670	[c]453,670	21.4	.....
Maryland	1,317,372,958	1,511,486,172	2,803,602	2,757,206	21.3	18.2
District of Columbia	628,730,773	1,040,383,173	1,076,629	1,576,354	11.6	15.1
Virginia	1,102,369,686	1,207,970,191	1,969,248	2,137,365	18.0	16.6
West Virginia	659,852,551	840,000,149	2,089,124	2,531,055	30.5	30.1
North Carolina	681,962,120	812,072,214	970,317	2,071,766	13.9	24.6
South Carolina	445,678,048	585,853,225	994,091	1,191,963	18.4	20.3
Georgia	930,670,450	1,167,445,671	1,980,016	2,240,247	21.2	19.2
Florida	355,742,909	431,409,209	765,777	945,849	21.5	21.9
South Central Division:						
Kentucky	1,365,139,718	1,527,486,230	3,037,968	2,662,863	22.3	17.4
Tennessee	976,672,090	1,104,224,970	1,751,047	2,602,141	18.3	23.6
Alabama	774,682,178	965,011,261	923,404	1,252,247	11.8	13.0
Mississippi	557,561,543	698,219,022	1,505,112	1,908,544	24.7	27.1
Louisiana	815,458,603	1,052,229,036	[d]1,135,125	1,551,232	13.9	15.0
Texas	2,522,151,031	2,836,322,033	4,465,255	6,240,587	19.2	21.9
Arkansas	604,218,211	803,007,072	1,389,810	1,729,879	22.7	21.5
Oklahoma	463,307,170	636,013,709	696,095	1,370,024	14.8	21.4
Indian Territory	348,272,643	479,021,355	.....	643,016	.....	14.0
North Central Division						
Ohio	5,010,094,453	5,946,969,466	13,333,211	15,802,002	26.6	26.6
Indiana	2,606,493,691	3,105,741,739	8,192,526	9,364,450	31.4	30.1
Illinois	6,976,176,469	8,816,556,191	17,757,145	21,792,751	25.5	24.7
Michigan	2,651,289,523	3,282,419,117	7,297,691	9,178,911	27.5	27.9
Wisconsin	2,405,351,427	2,838,678,239	5,493,370	7,885,091	22.8	27.8
Minnesota	2,513,629,926	3,343,722,076	5,630,013	8,071,723	22.4	24.1
Iowa	3,367,969,054	4,048,516,076	8,486,522	10,726,693	25.2	26.4
Missouri	3,944,532,987	3,759,597,451	7,816,060	9,878,198	24.1	26.3
North Dakota	542,390,595	735,902,909	1,526,189	2,316,346	28.1	31.5
South Dakota	572,732,540	679,940,939	1,605,823	2,329,135	29.0	32.9
Nebraska	1,630,203,203	2,009,583,633	4,403,222	4,774,140	27.1	23.8
Kansas	1,938,000,363	2,453,224,243	4,622,301	5,684,579	23.9	23.2
Western Division						
Montana	613,897,157	748,311,213	923,310	1,236,253	15.0	16.6
Wyoming	281,432,079	329,572,241	233,551	[c]233,551	9.0	.....
Colorado	938,170,021	1,207,512,107	2,793,648	3,981,867	29.8	33.0
New Mexico	206,285,425	332,262,650	343,429	354,012	12.4	10.6
Arizona	263,015,492	386,302,305	299,730	438,928	11.4	14.3
Utah	412,656,095	497,768,615	1,094,757	1,657,234	28.5	34.0
Nevada	180,626,987	220,734,507	221,622	257,501	11.8	11.7
Idaho	276,374,408	342,871,963	400,043	1,001,384	14.5	29.1
Washington	781,799,053	1,051,671,472	2,375,753	4,053,408	30.4	38.6
Oregon	632,479,729	852,053,232	1,594,429	1,803,339	25.2	21.2
California	3,216,573,255	4,115,491,106	6,909,351	9,401,465	21.5	22.8

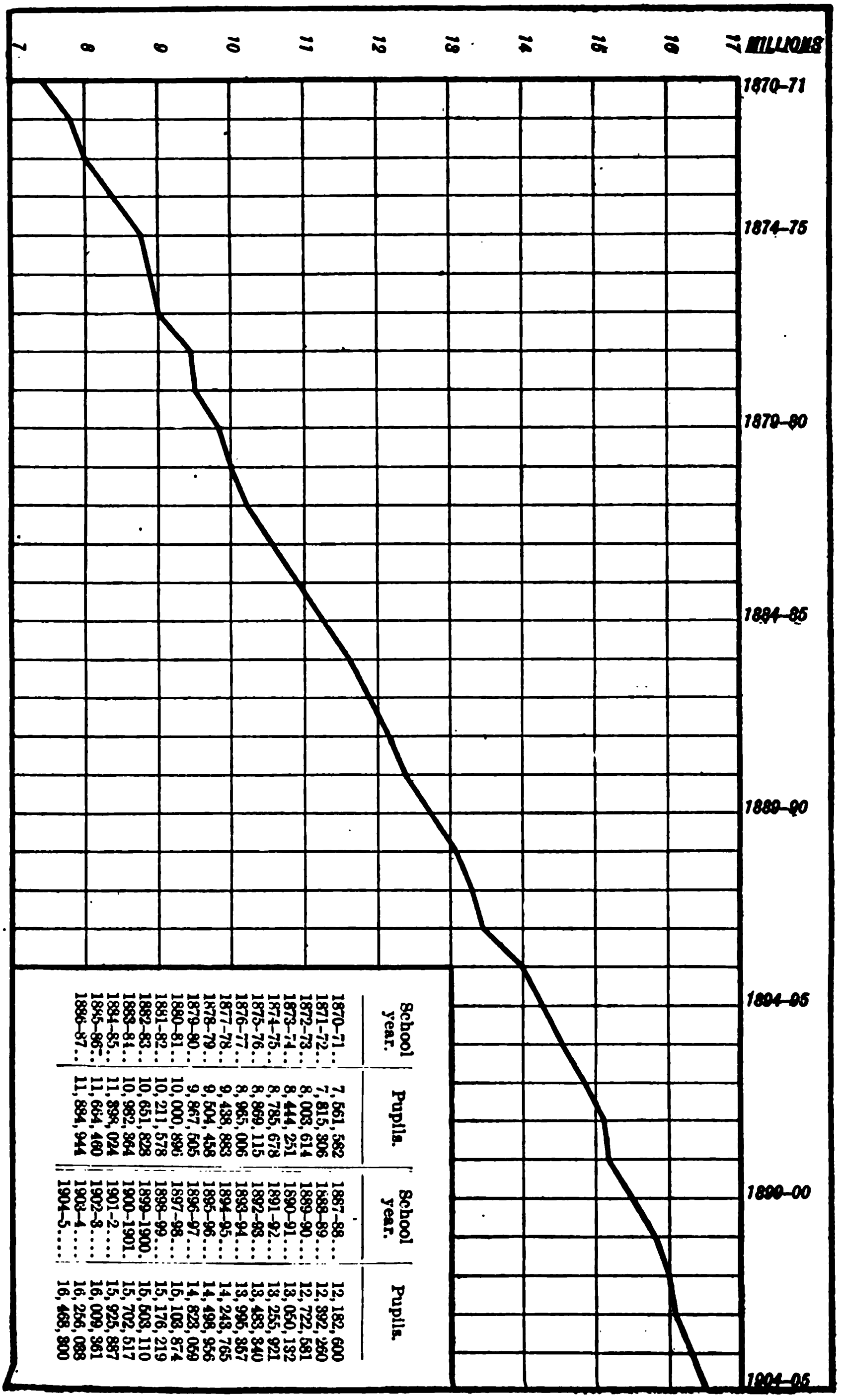
[a] From United States census reports.
[b] Excluding Indian Territory.
[c] Expenditure in 1900.
[d] Expenditure in 1901.

TABLE 21.—*Permanent school funds and school lands.*

State or Territory	Permanent common school funds, State and local [a]	Productive school lands.		Total value of permanent funds and productive lands.	Unproductive school lands.	
		Acres under lease	Estimated value of same.		Acres not under lease.	Estimated value of same.
1	2	3	4	5	6	7
United States	$192,077,288					
North Atlantic Division	22,190,766					
South Atlantic Division	4,658,095					
South Central Division	50,985,625					
North Central Division	97,237,267					
Western Division	17,004,935					
North Atlantic Division						
Maine	443,758					
New Hampshire	89,470	0	0	$89,470	0	0
Vermont	1,120,218	0	0	1,120,218	0	0
Massachusetts	4,820,111					
Rhode Island	257,414					
Connecticut	2,022,502					
New York	8,971,863	0	0	8,971,863	0	0
New Jersey	4,436,430	[b]			[b]	
Pennsylvania						
South Atlantic Division						
Delaware (1896–97)	[c] 350,000	0	0	[c] 350,000	0	0
Maryland						
District of Columbia	0	0	0	0	0	0
Virginia (1902–3)	1,783,828	0	0	1,783,828	0	0
West Virginia	[d] 1,000,000					
North Carolina (1903–4)	200,000	0	0	200,000	500,000	$500,000
South Carolina						
Georgia	[e]	[f]				
Florida (1903–4)	1,324,867					
South Central Division						
Kentucky (1901–2)	2,315,627					
Tennessee (1903–4)	2,512,500					
Alabama (1902–3)	2,135,313					
Mississippi (1902–3)	3,466,667					
Louisiana						
Texas	39,421,018	7,000,000	$10,500,000	49,921,018	8,000,000	8,195,444
Arkansas	1,134,570					
Oklahoma		2,055,000	20,000,000			
Indian Territory						
North Central Division						
Ohio (1901–2)	4,003,677					
Indiana	10,641,226				835	35,413
Illinois	17,431,776					
Michigan	5,228,333					
Wisconsin	3,600,213	0	0	3,600,213	20,100	100,000
Minnesota	15,978,478	0	0	15,978,478	1,000,000	5,354,088
Iowa	4,700,521					
Missouri	13,725,588					
North Dakota (1903–4)	4,764,923	[g]			[h] 2,168,154	21,661,540
South Dakota (1903–4)	4,005,938	1,197,890	17,968,484	22,064,422	705,925	[i] 7,059,250
Nebraska	5,844,262	1,920,456	12,000,000	17,844,262	497	2,000
Kansas	7,553,330	85,000	250,000	7,803,330	450,000	1,245,000
Western Division.						
Montana (1902–3)	618,777	1,478,638	2,500,000	3,118,777	1,000,000	1,500,000
Wyoming		2,400,000	4,800,000		1,058,000	529,000
Colorado	[f] 1,251,901	1,577,042	6,569,647	7,821,548	1,912,156	6,392,546
New Mexico	0	1,152,000			2,275,200	
Arizona						
Utah (1903–4)	444,418	72,000	126,000	570,418	1,838,361	2,757,541
Nevada (1903–4)	1,602,275					
Idaho	[g] 1,241,968	110,563	1,105,636	2,347,604	[c] 869,437	[c] 8,694,370
Washington	3,297,448	988,651	8,000,000	11,297,448	1,382,000	
Oregon	4,253,308	0	0	4,253,308	500,000	
California (1903–4)	4,294,750					

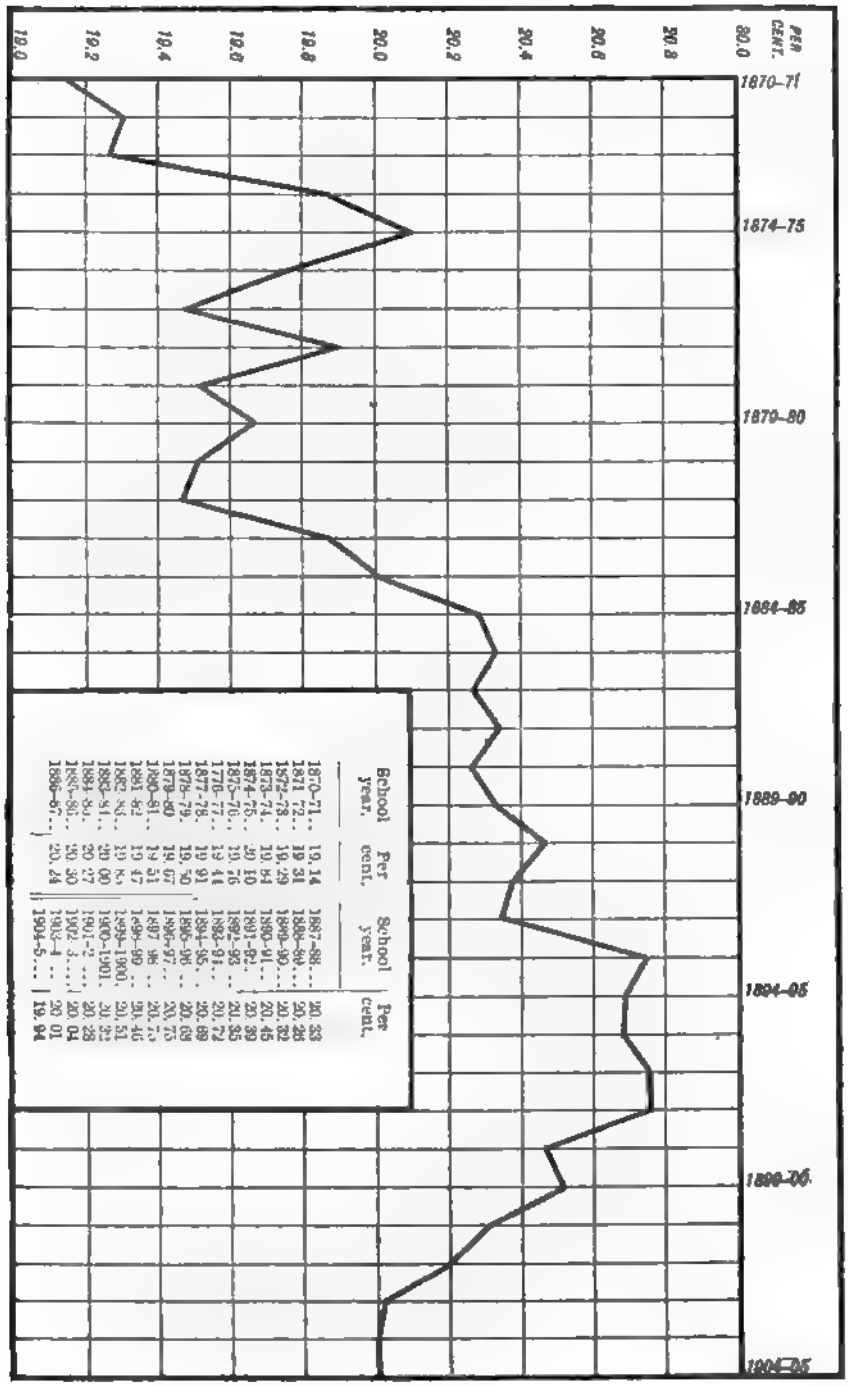
[a] Including unpaid principal due on contracts for purchase of school lands.
[b] Riparian lands; amount not determined.
[c] Approximately.
[d] Limited to $1,000,000 by constitutional amendment of 1902.
[e] Half the Western and Atlantic R. R. and some stock of the Georgia R. R.
[f] Oyster lands; amount not known.
[g] Included in column 6.
[h] Includes lands under lease.
[i] Constitutional minimum price $10 per acre.
[j] In 1901–2.
[k] In 1902–3.

DIAGRAM 1.—*Number of pupils enrolled in the common schools of the United States.*



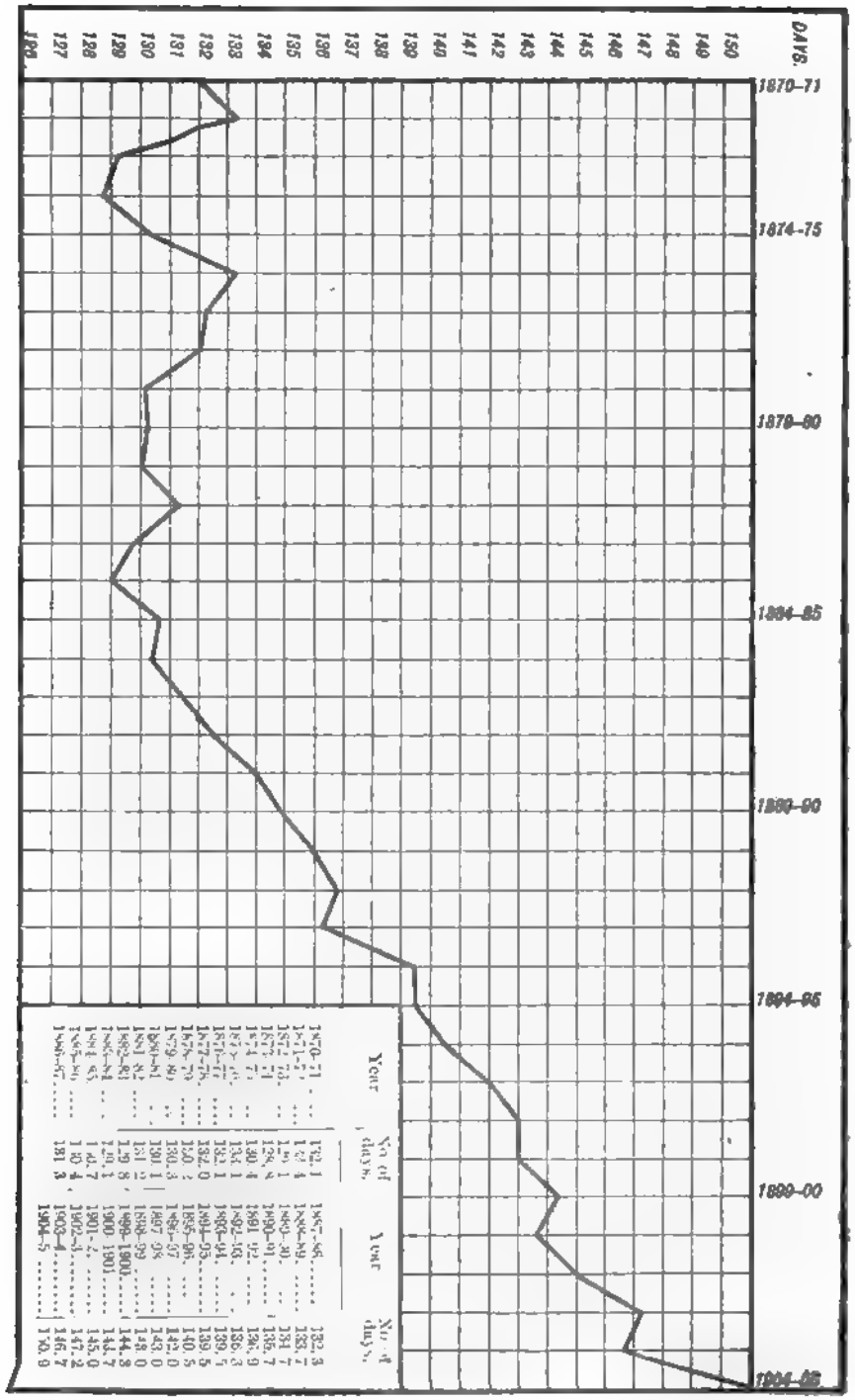
School year.	Pupils.	School year.	Pupils.
1870–71	7,561,582	1887–88	12,182,600
1871–72	7,815,306	1888–89	12,392,260
1872–73	8,003,614	1889–90	12,722,581
1873–74	8,444,251	1890–91	13,050,182
1874–75	8,785,678	1891–92	13,255,921
1875–76	8,869,115	1892–93	13,483,840
1876–77	8,965,006	1893–94	13,906,867
1877–78	9,438,883	1894–95	14,243,765
1878–79	9,504,458	1895–96	14,498,956
1879–80	9,867,505	1896–97	14,828,069
1880–81	10,000,896	1897–98	15,103,874
1881–82	10,211,578	1898–99	15,176,219
1882–83	10,651,828	1899–1900	15,503,110
1883–84	10,982,364	1900–1901	15,702,517
1884–85	11,898,024	1901–2	15,925,887
1885–86	11,664,460	1902–3	16,009,361
1886–87	11,884,944	1903–4	16,256,088
		1904–5	16,468,300

DIAGRAM 2.—*Per cent of population enrolled in common schools.*



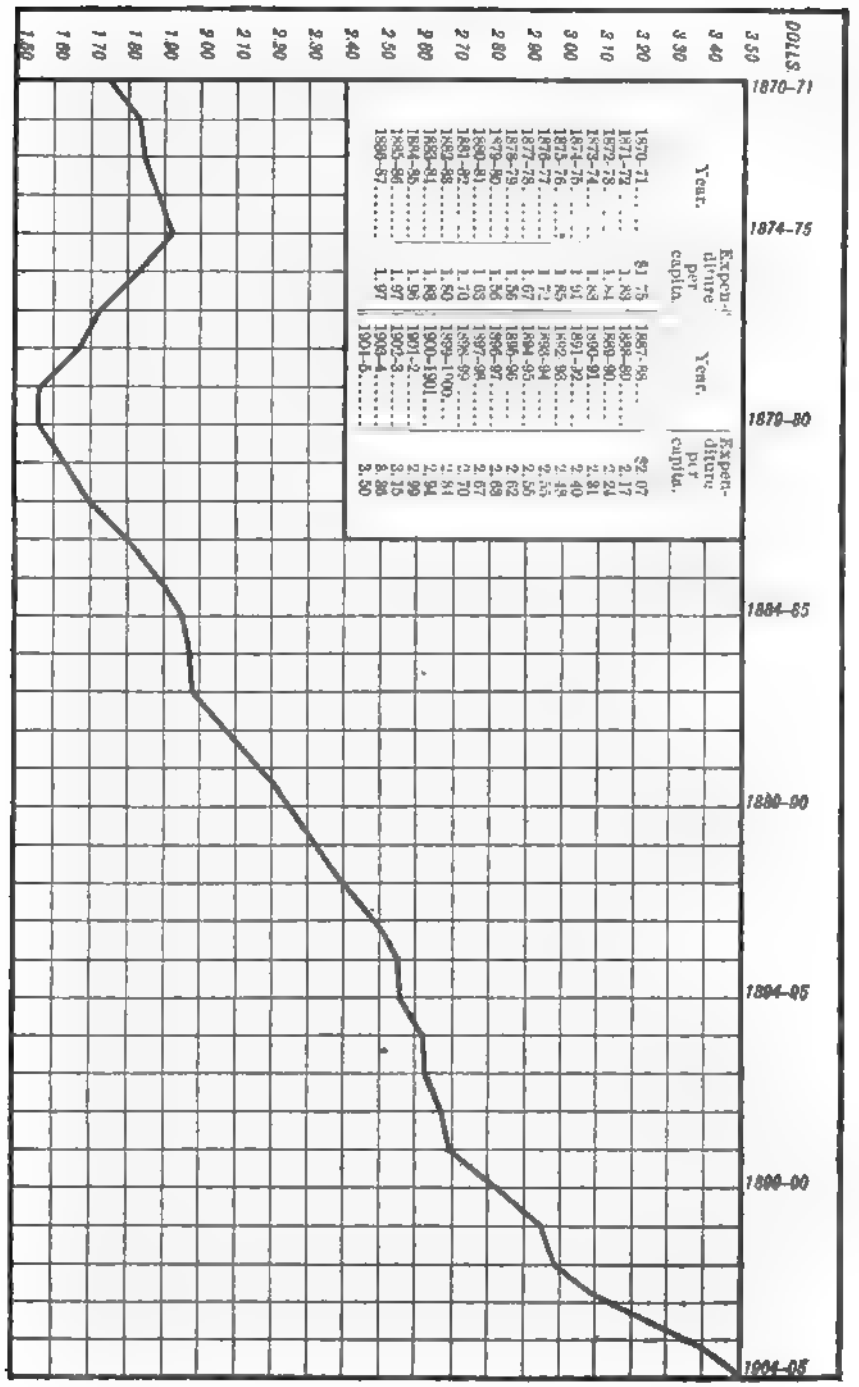
School year.	Per cent.	School year.	Per cent.
1870–71	19.14	1887–88	20.33
1871–72	19.31	1888–89	20.26
1872–73	19.29	1889–90	20.32
1873–74	19.04	1890–91	20.46
1874–75	20.10	1891–92	20.39
1875–76	19.16	1892–93	20.35
1776–77	19.44	1893–94	20.72
1877–78	19.91	1894–95	20.69
1878–79	19.50	1895–96	20.69
1879–80	19.67	1896–97	20.75
1880–81	19.31	1897–98	20.75
1881–82	19.47	1898–99	20.46
1882–83	19.85	1899–1900	20.51
1883–84	20.00	1900–1901	20.22
1884–85	20.27	1901–2	20.28
1885–86	20.30	1902–3	20.04
1886–87	20.24	1903–4	20.01
		1904–5	19.94

DIAGRAM 8.—*Length of school term.*



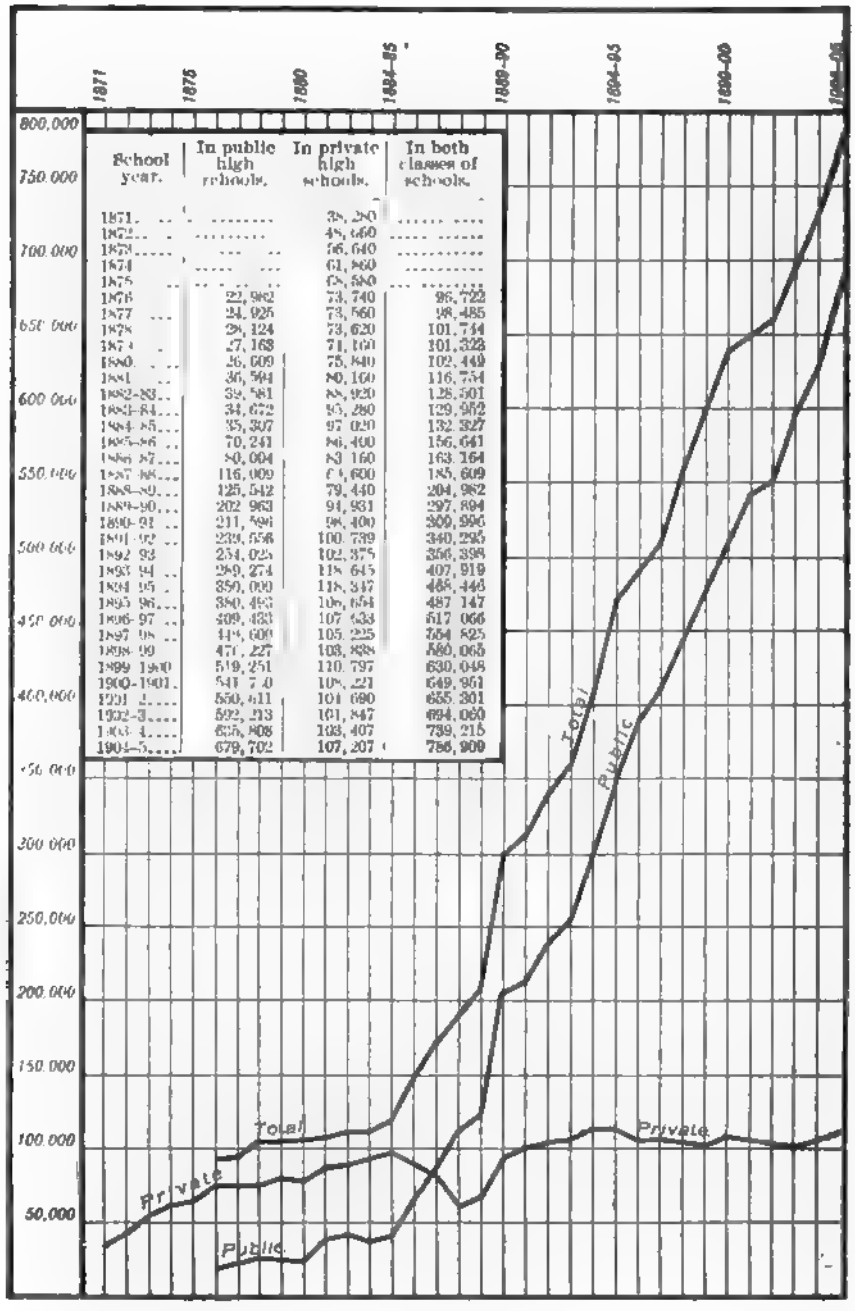
Year	No. of days.	Year	No. of days.
1870–71	132.1	1887–88	132.3
1871–72	132.4	1888–89	133.2
1872–73	134.1	1889–90	134.7
1873–74	134.8	1890–91	135.7
1874–75	136.4	1891–92	136.9
1875–76	134.1	1892–93	136.3
1876–77	133.1	1893–94	139.1
1877–78	132.0	1894–95	139.5
1878–79	130.2	1895–96	140.5
1879–80	130.3	1896–97	142.0
1880–81	130.1	1897–98	143.0
1881–82	131.2	1898–99	148.0
1882–83	129.8	1899–1900	144.8
1883–84	129.1	1900–1901	143.7
1884–85	130.7	1901–2	145.0
1885–86	130.4	1902–3	147.2
1886–87	131.3	1903–4	146.7
		1904–5	149.9

DIAGRAM 4.—*School expenditure per capita of population.*



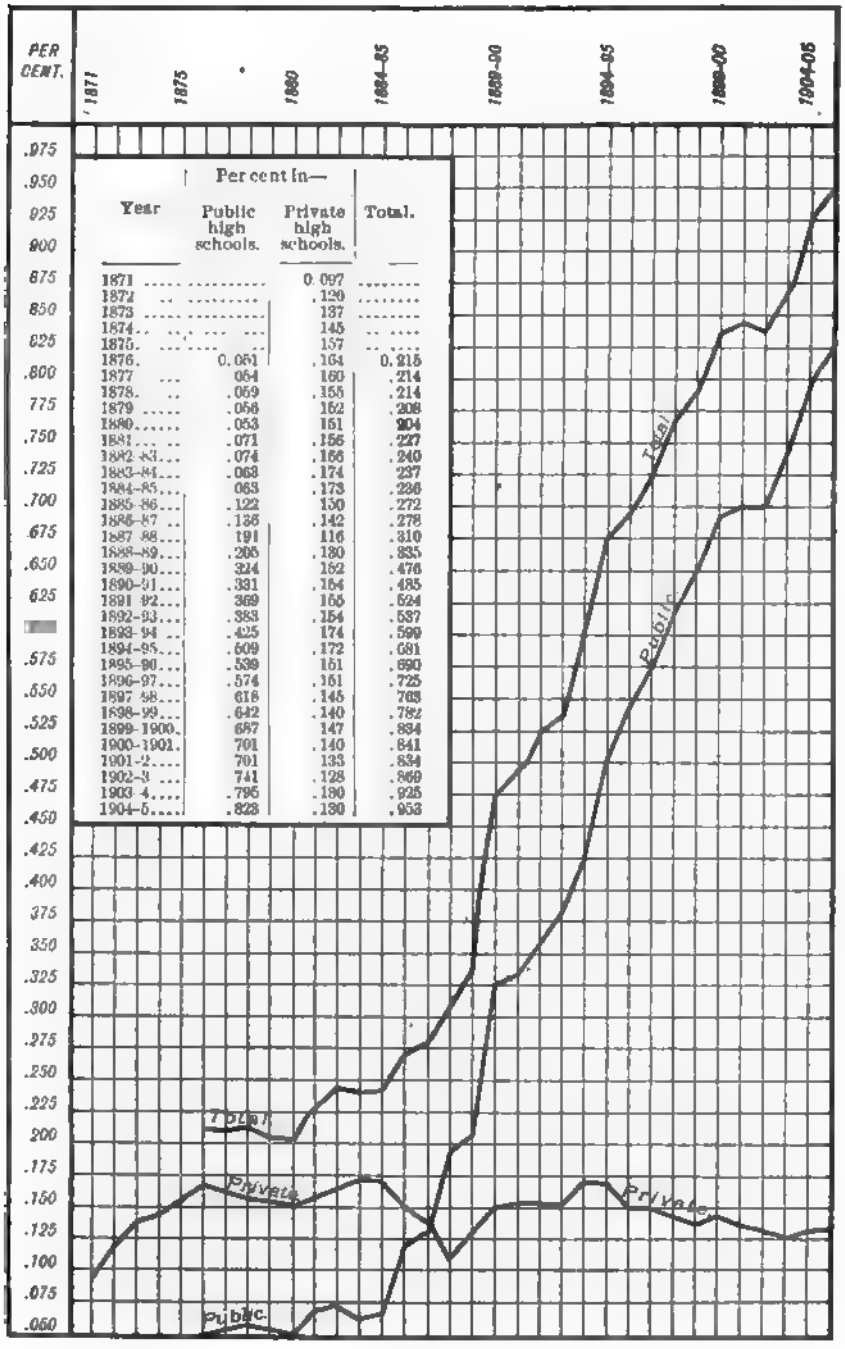
Year.	Expenditure per capita.	Year.	Expenditure per capita.
1870–71	$1 75	1887–88	$2 07
1871–72	1 83	1888–89	2 17
1872–73	1 84	1889–90	2 24
1873–74	1 83	1890–91	2 31
1874–75	1 91	1891–92	2 40
1875–76	1 85	1892–93	2 48
1876–77	1 74	1893–94	2 55
1877–78	1 67	1894–95	2 55
1878–79	1 56	1895–96	2 63
1879–80	1 56	1896–97	2 69
1880–81	1 63	1897–98	2 67
1881–82	1 70	1898–99	2 70
1882–83	1 69	1899–1900	2 84
1883–84	1 68	1900–1901	2 94
1884–85	1 96	1901–2	2 99
1885–86	1 97	1902–3	3 15
1886–87	1 97	1903–4	3 36
		1904–5	3 50

DIAGRAM 5.—*Number of secondary students in public and private secondary schools.*



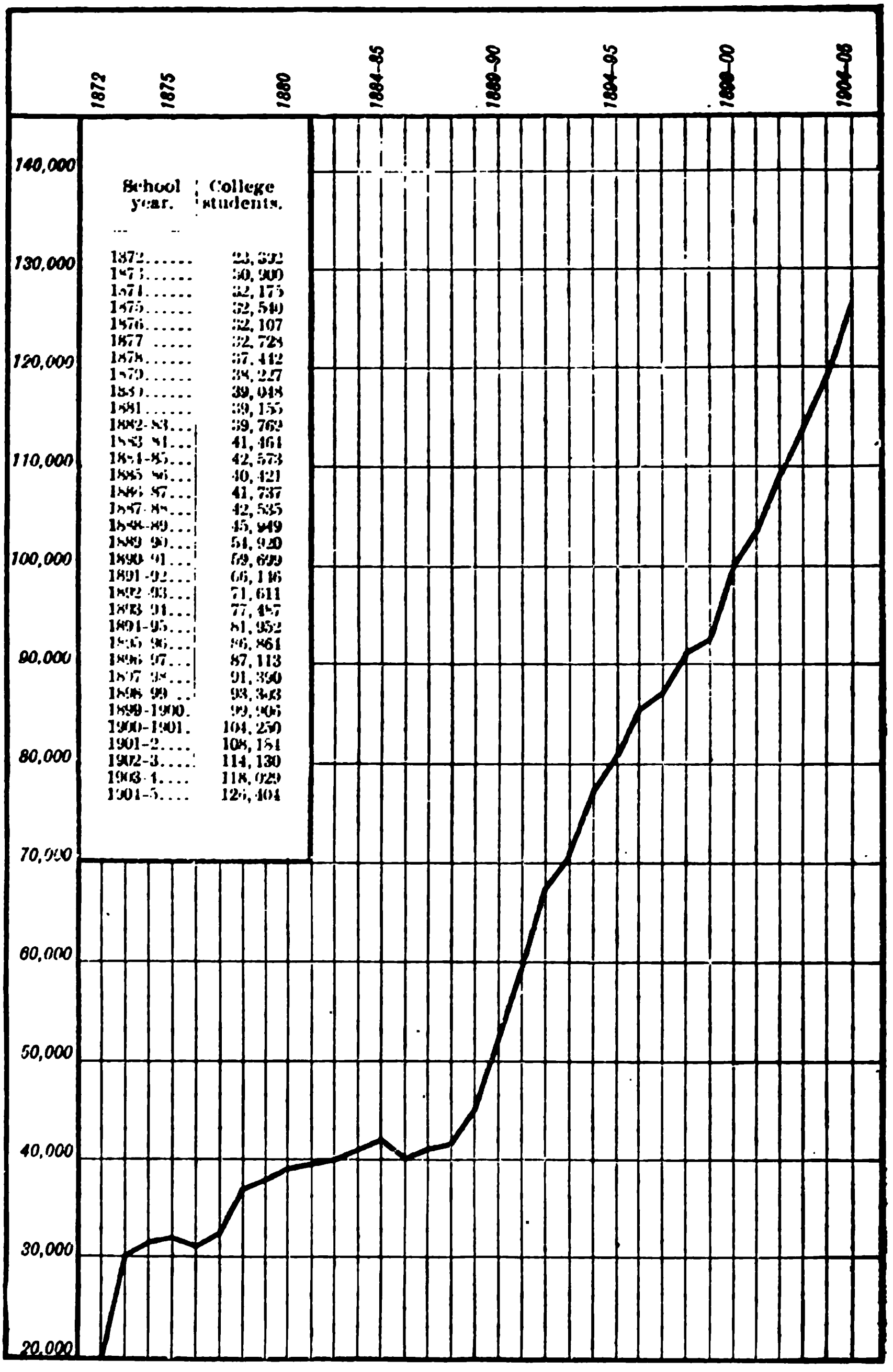
School year.	In public high schools.	In private high schools.	In both classes of schools.
1871	.....	38,380	.....
1872	.....	48,660	.....
1873	.....	56,640	.....
1874	.....	61,860	.....
1875	.....	68,580	.....
1876	22,982	73,740	96,722
1877	24,925	73,560	98,485
1878	29,124	73,620	101,744
1879	27,168	74,160	101,328
1880	26,609	75,840	102,449
1881	36,594	80,160	116,754
1882–83	39,581	88,920	128,501
1883–84	34,672	95,280	129,952
1884–85	35,307	97,020	132,327
1885–86	70,241	86,400	156,641
1886–87	80,004	83,160	163,164
1887–88	116,009	69,600	185,609
1888–89	125,542	79,440	204,982
1889–90	202,963	94,931	297,894
1890–91	211,596	98,400	309,996
1891–92	239,556	100,739	340,295
1892–93	254,025	102,375	356,398
1893–94	289,274	118,645	407,919
1894–95	350,000	118,347	468,446
1895–96	380,493	106,654	487,147
1896–97	409,433	107,633	517,066
1897–98	448,600	105,225	554,825
1898–99	471,227	103,838	580,065
1899–1900	519,251	110,797	630,048
1900–1901	541,740	108,221	649,961
1901–2	550,611	104,690	655,301
1902–3	592,213	101,847	694,060
1903–4	635,808	103,407	739,215
1904–5	679,702	107,207	786,909

DIAGRAM 6.—*Per cent of population enrolled as secondary students in public and private secondary schools.*



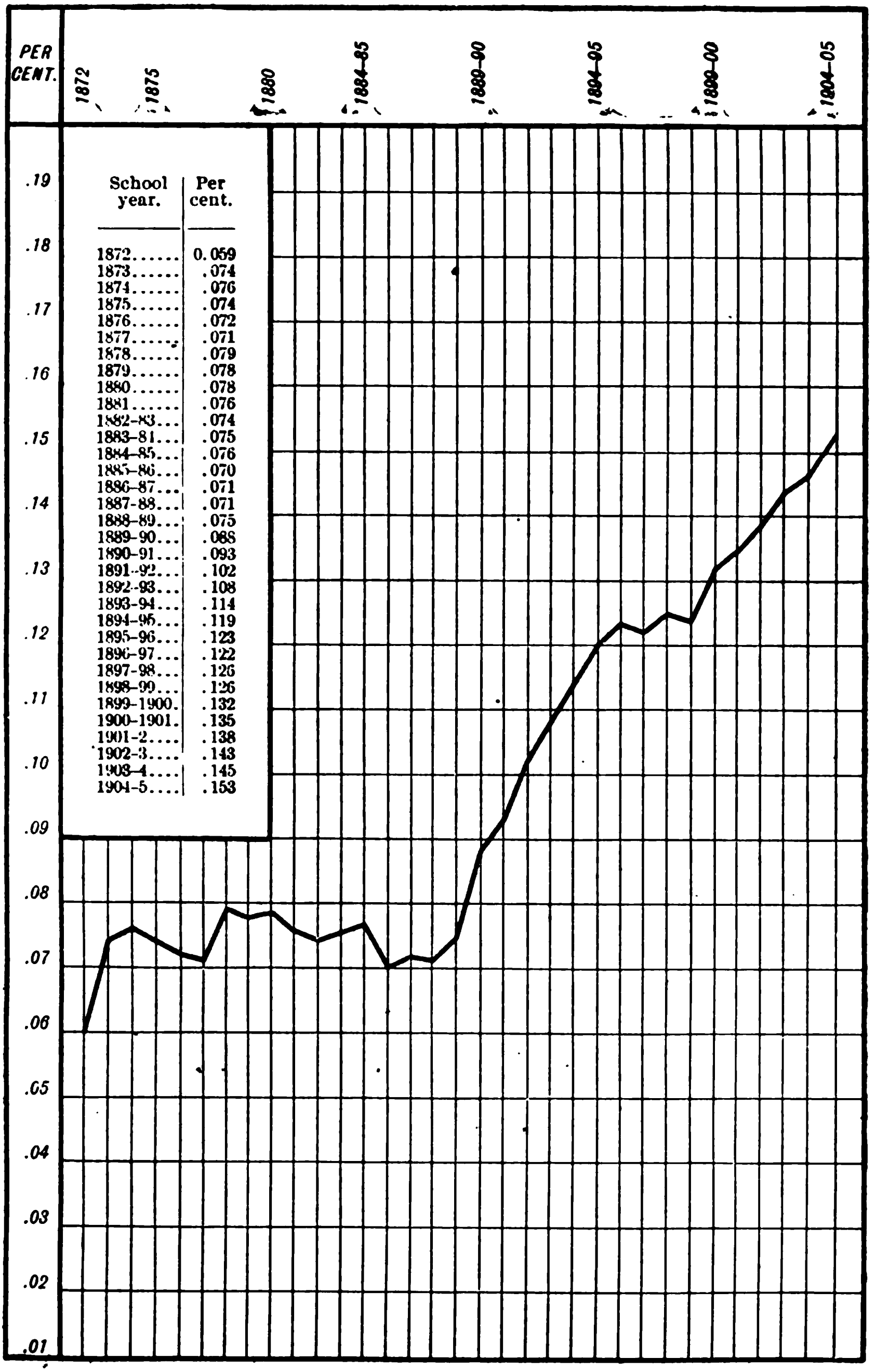
Year	Per cent in— Public high schools.	Private high schools.	Total.
1871		0.097	
1872		.120	
1873		.137	
1874		.145	
1875		.157	
1876	0.061	.164	0.225
1877	.064	.160	.224
1878	.059	.155	.214
1879	.056	.152	.208
1880	.053	.151	.204
1881	.071	.156	.227
1882–83	.074	.166	.240
1883–84	.063	.174	.237
1884–85	.063	.173	.236
1885–86	.122	.150	.272
1886–87	.136	.142	.278
1887–88	.191	.116	.310
1888–89	.205	.130	.335
1889–90	.314	.162	.476
1890–91	.331	.154	.485
1891–92	.369	.155	.524
1892–93	.383	.154	.537
1893–94	.425	.174	.599
1894–95	.509	.172	.681
1895–96	.539	.151	.690
1896–97	.574	.151	.725
1897–98	.618	.145	.763
1898–99	.642	.140	.782
1899–1900	.687	.147	.834
1900–1901	.701	.140	.841
1901–2	.701	.133	.834
1902–3	.741	.128	.869
1903–4	.795	.130	.925
1904–5	.823	.130	.953

DIAGRAM 7.—*Number of college students.*



School year.	College students.
1872.....	23,532
1873.....	30,900
1874.....	32,175
1875.....	32,540
1876.....	32,107
1877.....	32,728
1878.....	37,412
1879.....	38,227
1880.....	39,048
1881.....	39,155
1882-83...	39,769
1883-84...	41,464
1884-85...	42,573
1885-86...	40,421
1886-87...	41,737
1887-88...	42,535
1888-89...	45,949
1889-90...	54,920
1890-91...	59,699
1891-92...	66,146
1892-93...	71,611
1893-94...	77,457
1894-95...	81,952
1895-96...	86,861
1896-97...	87,113
1897-98...	91,350
1898-99...	93,363
1899-1900.	99,905
1900-1901.	104,250
1901-2....	108,184
1902-3....	114,130
1903-4....	118,929
1904-5....	126,404

DIAGRAM 8.—*Per cent of the total population enrolled as college students.*



School year.	Per cent.
1872.....	0.059
1873.....	.074
1874.....	.076
1875.....	.074
1876.....	.072
1877.....	.071
1878.....	.079
1879.....	.078
1880.....	.078
1881.....	.076
1882-83...	.074
1883-84...	.075
1884-85...	.076
1885-86...	.070
1886-87...	.071
1887-88...	.071
1888-89...	.075
1889-90...	.088
1890-91...	.093
1891-92...	.102
1892-93...	.108
1893-94...	.114
1894-95...	.119
1895-96...	.123
1896-97...	.122
1897-98...	.126
1898-99...	.126
1899-1900.	.132
1900-1901.	.135
1901-2....	.138
1902-3....	.143
1903-4....	.145
1904-5....	.153

CHAPTER XIX.

STATISTICS OF CITY SCHOOL SYSTEMS.

LIST OF TABLES.

TABLE 1.—Summary, by States, etc., of enrollment, attendance, supervising officers, and teachers in cities containing over 8,000 inhabitants, 1904–5.

TABLE 2.—Summary, by States, etc., of school property and expenditures in cities containing over 8,000 inhabitants, 1904–5.

TABLE 3.—Various items relating to schools in cities containing over 8,000 inhabitants, computed from data given in tables 1 and 2, by States, 1904–5.

TABLE 4.—Summarized statistics of schools in cities of over 8,000 inhabitants, by divisions, etc., from 1890–91 to 1904–5, inclusive.

TABLE 5.—Comparative statistics of cities containing over 8,000 inhabitants, summarized by divisions, etc., 1904–5.

TABLE 6.—Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5.

TABLE 7.—Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5.

TABLE 8.—Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5.

TABLE 9.—Statistics of expenditures of public schools of cities of over 8,000 inhabitants, 1904–5.

TABLE 10.—Summary of statistics of evening schools in cities of 8,000 population and over, 1904–5.

TABLE 11.—Statistics of evening schools in cities of 8,000 population and over, 1904–5.

TABLE 12.—Summary, by States, etc., of enrollment, attendance, supervising officers, and teachers in cities and villages containing from 4,000 to 8,000 inhabitants, 1904–5.

TABLE 13.—Summary, by States, etc., of school property and expenditures in cities and villages containing from 4,000 to 8,000 inhabitants, 1904–5.

TABLE 14.—School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5.

TABLE 15.—Summary of statistics of public kindergartens reported in cities of 4,000 population and over, 1904–5.

TABLE 16.—Public kindergartens in cities of over 4,000 inhabitants, 1904–5.

The table below summarizes the statistics of cities of 8,000 population and upward for the year 1904–5. Substantial increases over the preceding year are shown in all the items named. Some part of this increase is due to the transfer of six cities from the list of towns and villages to the list of cities of 8,000 population and over.

The proportion of women teachers to the whole number of teachers in the public schools remains the same as last year, namely, about 92 per cent. The increase in the whole number of teachers is greater by nearly 1 per cent than in 1904. This increase being proportionately greater than the increase of pupils in average daily attendance, indicates a slight decrease in the number of pupils to a teacher. This, however, is in line with the trend for many years.

The per cent of increase in the cost of teaching and supervision is substantially greater than the per cent of increase in the whole number of teachers and supervising officers. The conclusion to be deduced from this fact is that the pay of teachers has been increased during the year. This conclusion is supported by the figures in the succeeding tables.

Summary of statistics of cities containing over 8,000 inhabitants, showing increase from previous year.

	1903–4.	1904–5.	Increase.	Increase, per cent.
Number of city school systems	588	594	6	1.02
Enrollment	4,374,463	4,506,678	132,215	3.02
Aggregate number of days' attendance	630,662,688	651,970,275	21,307,587	3.38
Average daily attendance	3,354,806	3,434,323	79,517	2.07
Average length of the school term in days	187.9	189.8	1.9	1.00
Enrollment in private and parochial schools	1,006,552	1,012,380	5,828	.58
Male supervising officers	2,799	2,811	12	.42
Female supervising officers	2,820	2,918	98	3.04
Whole number of supervising officers	5,619	5,729	110	1.96
Number of male teachers	7,269	7,769	480	6.59
Number of female teachers	89,335	92,417	3,082	3.45
Whole number of teachers	96,624	100,186	3,562	3.69
Number of buildings	10,069	10,179	110	1.10
Number of seats	4,151,938	4,314,319	162,381	3.91
Value of school property	$410,326,526	$424,859,805	$14,533,279	3.54
Expenditure for tuition	$74,332,482	$78,328,420	$3,995,938	5.37
Total expenditure	$129,836,203	$139,417,318	$9,581,115	7.37

EVENING SCHOOLS.

Tables 10 and 11 are devoted to evening schools. Sixty-nine per cent of the cities reporting schools of this class are found in the North Atlantic Division. A decline of 33 in the number of schools reported for 1905 is noted in the following table. This decline is due to the fact that Scranton, Pa., which reported 60 schools for 1904, did not maintain evening schools during the school year 1904–5. The enrollment in that city for 1904 was 2,304 and the withdrawal of this large number from the statistics for the present year makes the rate of increase smaller than usual.

Summary of evening schools for 1904–5, showing increase from previous year.

	1903–4.	1904–5.	Increase.	Increase, per cent.
Number of cities reporting evening schools	178	180	2	1.12
Number of schools	955	922	[a] 33	[a] 3.57
Number of teachers	6,310	6,572	262	4.15
Number of pupils	270,692	292,319	21,627	7.98
Average daily attendance	106,983	107,375	392	0.04
Ratio of average attendance to enrollment	40.4	36.7	.....	.....

[a] Decrease.

KINDERGARTENS.

In Table 15 are summarized the statistics of public kindergartens in cities and villages. About 30 per cent of the whole number of city and village systems report schools of this class. The increase in the enrollment, although less than for the year 1904, is, nevertheless, about double the rate of increase in the entire enrollment in all grades in the public schools reported the present year. The enrollment in kindergartens constitutes about 4 per cent of the entire enrollment in city and village public schools.

Summary of public kindergartens for 1904–5, showing increase from previous year.

	1903–4.	1904–5.	Increase.	Increase, per cent.
Number of cities and villages reporting	353	358	5	1.41
Number of schools	2,997	3,176	179	5.97
Number of pupils	191,882	205,118	13,236	6.89
Number of teachers	4,534	4,795	261	5.75

SCHOOLS IN CITIES, TOWNS, AND VILLAGES OF THE SECOND CLASS.

The transfer of six cities from the list of towns and villages to that of cities of 8,000 inhabitants and over has served to make the rate of increase in many of the items named in the following table appear smaller than usual. The ratios of increase compared with those of the year 1904 appear still smaller by reason of the fact that 35 additions were made to this list that year. Owing to the lack of satisfactory data no additions were made to this table during the present year.

Taking into account the deductions named above, the rate of increase of the various items in the following table compares very evenly with that of the corresponding items in the first table. The amount paid for supervision and teaching is also shown by the following table to have increased at a greater rate than has the number of officers and teachers.

Summary of statistics of cities and villages containing from 4,000 to 8,000 inhabitants, showing increase from previous year.

	1903–4.	1904–5.	Increase.	Increase, per cent.
Number of city and village school systems	624	618	[a] 6	[a] 0.97
Enrollment	704,201	707,205	3,004	.42
Aggregate number of days' attendance	95,943,867	97,468,177	1,524,310	1.58
Average daily attendance	535,819	543,965	8,146	1.52
Average length of the school term in days	179.1	179.2	.1	[b]
Enrollment in private and parochial schools	96,123	95,550	[a] 573	[a] .59
Whole number of supervising officers	1,180	1,213	23	1.94
Number of male teachers	1,781	1,793	12	.67
Number of female teachers	14,522	14,735	213	1.46
Whole number of teachers	16,303	16,528	225	1.38
Number of buildings	3,123	3,122	[a] 1	[b]
Number of seats	719,663	714,175	[a] 5,488	[a] .76
Value of school property	$48,363,617	$49,990,848	$48,363,617	3.36
Expenditure for tuition	$8,616,070	$8,786,570	$170,500	1.97
Total expenditure	$13,065,815	$13,590,101	$524,286	4.01

[a] Decrease. [b] Negligible.

TABLE 1.—*Summary, by States, etc., of enrollment, attendance, supervising officers, and teachers in cities containing over 8,000 inhabitants, 1904–5.*

Cities of—	Number of city school systems.	Population, census of 1900.	Enrollment in public day schools.	Aggregate number of days' attendance of all pupils.	Average daily attendance.	Number of supervising officers.			Number of teachers.			Enrollment in private and parochial schools (largely estimated.).
						Men.	Women.	Total.	Men.	Women.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13
United States[a]	594	25,362,430	4,606,678	651,970,275	3,434,223	2,811	2,918	5,729	7,769	92,417	100,186	1,012,380
North Atlantic Division	243	12,407,503	2,201,442	321,595,506	1,691,068	1,290	1,451	2,741	3,611	45,528	49,139	480,570
South Atlantic Division	45	1,836,288	295,446	39,829,198	218,436	162	170	332	581	5,715	6,296	[b] 51,015
South Central Division	53	1,589,369	252,567	33,571,545	186,119	147	95	242	536	4,613	5,149	65,900
North Central Division	215	8,201,229	1,466,289	215,720,552	1,117,206	984	1,054	2,038	2,501	30,486	32,987	366,943
Western Division	38	1,329,041	290,932	41,253,474	221,495	228	148	376	540	6,075	6,615	[c] 47,952
North Atlantic Division:												
Maine	9	194,639	25,454	3,562,600	20,769	23	22	45	53	726	779	7,545
New Hampshire	10	158,920	21,641	2,907,217	16,694	19	12	31	47	530	577	7,560
Vermont	3	38,537	6,806	1,003,215	5,678	3	6	9	13	172	185	2,126
Massachusetts	57	2,140,550	379,967	60,428,620	318,780	257	175	432	743	8,950	9,693	79,040
Rhode Island	10	347,892	57,481	8,138,244	43,223	17	17	34	106	1,307	1,413	15,321
Connecticut	22	542,756	100,230	15,010,746	79,345	83	66	149	157	2,336	2,493	22,805
New York	50	4,989,059	920,216	133,143,405	693,389	487	768	1,255	1,529	17,878	19,407	209,885
New Jersey	27	1,151,493	207,125	29,732,769	155,347	163	138	301	169	4,322	4,491	45,070
Pennsylvania	55	2,873,607	482,432	67,648,598	357,863	238	247	485	794	9,307	10,101	91,218
South Atlantic Division:												
Delaware	1	76,508	11,009	1,589,834	8,206	2	30	32	9	253	262	.....
Maryland	5	557,374	89,471	11,499,937	60,937	37	24	61	181	1,626	1,807	15,550
District of Columbia	1	278,718	31,230	7,347,878	40,596	22	16	38	156	1,234	1,390	6,000
Virginia	10	271,695	39,834	5,704,307	31,289	34	25	59	70	711	781	8,425
West Virginia	4	73,603	14,874	2,024,240	11,351	12	13	25	29	325	354	2,520
North Carolina	9	111,126	20,454	2,505,241	14,363	14	13	27	45	368	413	2,490
South Carolina	4	100,170	16,407	1,970,434	10,902	9	8	17	17	216	233	3,040
Georgia	7	287,965	39,236	5,881,157	31,908	28	39	67	54	760	814	6,700
Florida	4	79,129	12,033	1,326,172	8,784	4	2	6	20	222	242	3,000
South Central Division:												
Kentucky	9	362,959	54,427	7,738,467	40,674	39	32	71	92	1,004	1,096	15,045
Tennessee	6	289,918	39,309	5,289,572	29,186	29	12	41	87	672	759	6,000
Alabama	6	133,706	19,573	2,489,686	14,281	12	8	20	45	343	388	6,227
Mississippi	4	48,910	9,204	1,161,338	6,568	10	3	13	10	173	183	3,250
Louisiana	3	314,386	34,769	4,822,432	27,186	8	14	22	23	833	856	19,000
Texas	19	367,084	73,579	9,307,257	52,770	42	20	62	221	1,218	1,439	13,799
Arkansas	4	71,363	14,320	1,903,393	10,650	5	3	8	41	212	253	1,779
Oklahoma	2	30,042	7,386	889,200	4,814	2	3	5	17	158	175	800

North Central Division:												
Ohio	38	1,599,849	277,753	41,242,563	220,671	174	188	362	536	5,849	6,385	80 730
Indiana	26	622,841	113,989	15,929,989	87,011	78	85	163	327	2,547	2,874	28,054
Illinois	37	2,287,317	392,539	61,222,496	318,990	269	214	483	451	7,576	8,027	99,909
Michigan	29	795,124	143,279	21,705,653	113,271	79	147	226	204	3,204	3,408	40,264
Wisconsin	22	634,437	116,062	17,311 376	90,596	132	63	195	260	2,454	2,714	36,1[illegible]
Minnesota	9	485,438	93,341	14,521,106	76,448	41	106	149	97	2,026	2,123	22,278
Iowa	21	382,712	80,874	10,720,064	59,848	60	105	165	111	1,871	1,982	14,925
Missouri	12	963,545	154,003	20,839,396	111,697	116	74	190	366	3,163	3,529	34,056
North Dakota	2	17,241	3,853	587,410	3,173	2	6	8	8	97	105	100
South Dakota	1	10,266	2,616	354,600	1,970	3	6	9	1	59	60	200
Nebraska	5	183,798	35,619	4,983,894	27,467	12	46	58	34	754	788	5,300
Kansas	13	218,080	52,561	6,302,000	36,063	18	12	30	106	886	992	5,000
Western Division:												
Montana	4	65,623	14,606	2,079,257	11,563	12	24	36	13	336	349	2,310
Wyoming	1	14,087	1,412	184,189	1,084	1	1	2	2	30	32	.....
Colorado	6	205,703	50,967	6,847,488	37,177	46	33	79	117	1,131	1,248	3,107
Arizona	1	7,531	1,670	188,153	1,107	1	1	2	0	28	28	500
Utah	2	69,844	18,912	2,646,315	15,121	31	9	40	41	396	437	1,044
Idaho	1	5,957	2,686	345,500	1,974	2	1	3	6	50	56	300
Washington	7	188,750	50,713	7,309,816	38,717	44	39	83	94	1,033	1,127	3,209
Oregon	2	98,807	16,450	2,446,565	12,849	18	5	23	20	350	370	2,100
California	14	672,739	133,516	19,206,191	101,903	73	35	108	247	2,721	2,968	35,132

a Including estimates for statistics of cities not reported fully.
b Including estimate for Delaware
c Including estimate for Wyoming.

TABLE 2.—*Summary, by States, etc., of school property and expenditures in cities containing over 8,000 inhabitants, 1904–5.*

Cities of—	Number of school buildings.	Number of seats or sittings for study.	Value of all public property used for school purposes.	Expenditure for supervision and teaching	Expenditure for all purposes (loans and bonds excepted).
1	2	3	4	5	6
United States [a]	10,179	4,318,319	$424,859,805	$78,328,420	$139,417,318
North Atlantic Division	4,030	2,150,507	224,117,085	41,640,361	77,431,281
South Atlantic Division	707	280,530	16,611,349	3,933,805	5,647,287
South Central Division	605	236,138	14,294,791	3,107,719	4,396,227
North Central Division	3,206	1,369,187	138,367,316	23,945,316	42,381,322
Western Division	731	281,957	31,469,264	5,701,219	9,656,201
North Atlantic Division:					
Maine	187	25,635	2,120,054	353,833	509,676
New Hampshire	126	21,352	2,437,968	328,241	611,902
Vermont	35	7,900	648,600	94,951	162,569
Massachusetts	1,445	388,087	59,584,986	7,692,723	13,982,598
Rhode Island	263	58,313	5,296,887	945,746	1,705,877
Connecticut	320	99,538	11,247,257	1,542,871	2,553,256
New York	1,142	860,953	106,133,716	20,582,879	39,155,340
New Jersey	351	196,864	14,867,797	3,267,961	5,859,710
Pennsylvania	1,061	492,255	22,779,823	6,831,176	12,895,453
South Atlantic Division:					
Delaware	29	11,060	931,985	150,440	237,209
Maryland	167	86,855	3,479,998	1,155,875	1,520,491
District of Columbia	149	45,173	6,062,233	1,101,552	1,676,259
Virginia	88	37,513	1,095,000	405,035	550,610
West Virginia	46	15,741	1,443,611	188,033	302,007
North Carolina	50	18,065	805,000	172,636	221,224
South Carolina	22	13,832	412,681	107,740	144,016
Georgia	107	38,356	1,508,900	509,601	650,407
Florida	49	13,915	181,941	141,993	184,884
South Central Division:					
Kentucky	125	52,755	2,872,000	706,181	1,097,018
Tennessee	76	34,829	1,945,103	444,817	610,967
Alabama	41	15,740	848,000	201,589	282,461
Mississippi	18	8,930	532,500	89,044	101,737
Louisiana	83	36,740	2,350,000	473,900	585,093
Texas	199	67,054	4,259,912	917,919	1,286,530
Arkansas	49	13,448	937,216	114,269	259,901
Oklahoma	14	6,635	550,000	70,000	166,500
North Central Division:					
Ohio	505	223,273	26,779,838	4,647,380	7,683,364
Indiana	303	111,163	10,265,881	1,835,730	3,524,395
Illinois	731	361,033	41,923,703	7,072,731	12,921,955
Michigan	370	139,856	12,399,509	2,210,997	3,618,386
Wisconsin	292	119,509	9,651,392	1,762,398	2,767,793
Minnesota	182	93,932	8,176,198	1,580,579	2,469,910
Iowa	234	76,642	7,430,435	1,179,197	1,970,988
Missouri	296	152,193	14,271,937	2,439,302	4,885,201
North Dakota	10	4,200	375,000	65,329	164,403
South Dakota	10	2,531	325,000	37,536	63,485
Nebraska	81	35,011	3,358,698	572,050	1,282,099
Kansas	132	49,747	3,409,725	550,587	1,020,186
Western Division:					
Montana	46	15,010	1,695,175	323,103	571,751
Wyoming	5	1,340	139,517	25,704	37,878
Colorado	120	49,995	6,432,302	1,058,243	1,824,213
Arizona	5	1,400	113,696	20,070	26,455
Utah	42	18,826	1,568,949	302,436	570,712
Idaho	6	2,600	175,000	41,676	80,940
Washington	127	47,007	5,212,035	853,112	1,955,182
Oregon	36	17,645	1,475,798	246,122	472,851
California	344	128,134	15,656,789	2,830 693	4,116,219

[a] Including estimates for statistics of cities not reported fully.

TABLE 3.—*Various items relating to schools in cities containing over 8,000 inhabitants, computed from data given in Tables 1 and 2, by States, etc., 1904–5.*

Cities of—	Ratio of private school enrollment to enrollment in all schools, public and private.	Ratio of average attendance to enrollment (public schools).	Average number of days' attendance of each pupil enrolled.	Average length of school term.	Average number of pupils in attendance to each teacher.	Average number of teachers to each supervising officer.	Average number of seats to each 100 pupils in attendance.	Average number of seats to a building.	Value of school property per capita of pupils in average attendance.	Cost of teaching and supervision per capita of pupils in average attendance.	Total cost of schools per capita of pupils in average attendance.	Average cost per day of tuition for one pupil.	Average daily expenditure per pupil for all purposes.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Per cent.	*Per cent*	*Days.*	*Days.*								*Cents.*	*Cents.*
United States	16.5	76.2	144.7	180.8	34.3	17.5	125.7	424	$123.70	$22.81	$40.59	12.01	21.33
North Atlantic Division	17.8	76.8	146.1	190.2	34.4	17.9	127.2	436	132.53	24.82	45.79	12.94	24.07
South Atlantic Division	14.7	70.9	124.8	182.3	34.7	18.9	128.4	397	76.08	18.01	25.39	9.68	13.93
South Central Division	20.6	73.7	132.9	180.4	36.2	21.1	126.9	390	76.80	16.89	23.62	9.25	13.09
North Central Division	20.1	76.2	147.8	193.1	33.9	16.2	122.6	427	123.85	21.42	37.00	11.09	19.16
Western Division	14.1	76.1	141.8	186.2	33.5	17.6	127.3	365	142.98	25.74	44.39	13.73	23.84
North Atlantic Division:													
Maine	22.8	81.6	140.7	172.6	26.7	17.3	122.0	135	102.07	17.03	24.54	9.87	14.23
New Hampshire	25.7	77.2	134.3	172.9	28.9	18.6	127.9	169	146.03	19.66	36.71	11.37	21.23
Vermont	23.5	82.3	145.5	176.7	30.7	20.5	137.3	223	114.23	16.72	28.62	9.46	16.19
Massachusetts	17.2	83.8	159.0	189.6	32.9	22.4	121.7	268	180.93	24.13	43.87	12.73	23.14
Rhode Island	21.0	75.2	141.6	188.3	30.6	41.6	134.9	221	137.56	21.88	38.47	11.62	20.97
Connecticut	18.5	79.1	149.7	189.2	31.8	16.7	126.0	311	141.75	19.45	32.18	10.28	17.11
New York	18.6	75.3	144.7	192.0	35.2	15.5	124.2	753	151.62	29.08	56.47	15.45	29.41
New Jersey	17.9	75.0	143.5	191.4	34.6	14.9	126.5	561	95.70	21.04	37.71	10.90	18.13
Pennsylvania	15.9	74.2	140.2	189.1	35.4	20.8	137.6	464	53.65	19.09	36.03	10.08	19.59
South Atlantic Division.													
Delaware		75.5	142.6	189.0	31.7	8.2	133.4	382	112.20	18.11	28.57	9.58	15.11
Maryland	14.8	68.1	128.5	188.7	33.7	29.6	142.5	520	87.10	18.97	24.95	10.05	13.22
District of Columbia	10.5	79.2	143.4	181.9	29.2	36.0	111.2	303	149.33	27.13	41.29	14.91	22.69
Virginia	17.5	73.8	143.2	182.3	40.1	13.2	119.9	426	84.17	12.94	17.59	7.09	9.64
West Virginia	14.5	76.3	136.1	178.3	32.1	14.1	137.9	342	127.17	16.56	31.90	9.28	17.89
North Carolina	10.9	70.2	122.4	174.4	34.8	15.3	125.8	361	56.04	12.02	15.40	6.89	8.83
South Carolina	15.6	66.2	120.1	180.7	46.8	13.7	127.8	629	37.85	9.06	13.21	5.01	7.31
Georgia	14.6	81.2	149.8	184.3	39.2	12.1	119.9	358	50.10	15.97	20.39	8.66	11.06
Florida	18.8	67.9	102.5	150.9	30.7	40.3	158.4	284	20.71	10.16	21.05	10.70	13.94

TABLE 3.—*Various items relating to schools in cities containing over 8,000 inhabitants, computed from data given in Tables 1 and 2, by States, etc., 1904–5*—Continued.

Cities of—	Ratio of private school enrollment to enrollment in all schools, public and private.	Ratio of average attendance to enrollment (public schools).	Average number of days' attendance of each pupil enrolled.	Average length of school term.	Average number of pupils in attendance to each teacher.	Average number of teachers to each supervising officer.	Average number of seats to each 100 pupils in attendance.	Average number of seats to a building.	Value of school property per capita of pupils in average attendance.	Cost of teaching and supervision per capita of pupils in average attendance.	Total cost of schools per capita of pupils in average attendance.	Average cost per day of tuition for one pupil.	Average daily expenditure per pupil for all purposes.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
South Central Division	*Per cent*	*Per cent*	*Days.*	*Days.*								*Cents.*	*Cents.*
Kentucky	21.6	72.1	142.2	190.2	37.1	15.4	129.7	422	$70.60	$19.57	$26.97	10.28	14.17
Tennessee	13.2	74.7	134.6	181.2	38.4	18.5	119.3	458	66.64	15.24	21.14	8.41	11.66
Alabama	24.1	72.9	127.2	174.3	36.7	19.4	110.3	384	59.30	14.11	19.78	8.09	11.34
Mississippi	26.1	71.2	126.0	177.1	35.8	14.1	136.2	406	81.19	13.56	16.36	7.65	8.67
Louisiana	35.3	77.9	138.7	177.7	31.7	38.9	135.1	443	86.44	17.43	21.52	9.80	12.11
Texas	15.8	71.7	126.5	176.0	36.7	23.2	127.1	366	80.72	17.39	24.39	9.58	13.80
Arkansas	10.4	74.4	132.9	188.1	42.1	31.6	126.3	274	86.00	10.73	24.44	5.70	12.99
Oklahoma	9.8	65.1	116.3	178.5	27.5	35.0	137.8	473	114.25	14.54	34.57	8.09	19.36
North Central Division													
Ohio	22.5	79.4	148.4	186.9	34.6	17.6	101.2	395	121.35	21.06	34.82	11.27	18.63
Indiana	19.7	76.3	139.7	183.1	30.3	17.6	127.7	367	117.98	21.09	40.51	11.46	22.07
Illinois	20.1	81.2	155.9	191.9	39.7	16.6	113.1	494	131.42	22.17	40.51	11.55	21.11
Michigan	21.9	79.1	151.5	191.6	53.2	15.1	123.4	378	109.46	19.52	31.94	10.19	16.67
Wisconsin	23.7	78.1	149.1	191.1	33.4	13.9	132.0	409	106.53	19.45	30.55	10.17	15.99
Minnesota	19.2	81.9	155.5	190.2	36.0	14.5	122.0	516	106.95	20.68	32.31	10.87	16.98
Iowa	15.6	74.2	132.9	179.1	30.2	12.0	128.1	328	124.15	19.55	32.03	10.92	18.33
Missouri	16.2	72.5	135.2	186.0	31.7	18.5	136.1	514	127.77	21.84	43.74	11.70	23.43
North Dakota	2.5	82.3	152.4	185.1	31.2	13.1	132.4	420	118.18	20.50	51.81	11.12	27.99
South Dakota	7.1	75.3	135.5	180.0	32.8	6.8	128.5	253	164.97	19.05	32.23	10.55	17.01
Nebraska	12.9	77.1	139.9	181.4	34.6	13.6	127.5	432	122.28	20.83	46.68	11.48	25.73
Kansas	8.7	68.6	119.9	174.8	36.3	33.1	137.9	377	94.54	15.27	28.54	8.73	16.33
Western Division													
Montana	13.7	70.2	142.3	179.8	33.1	9.7	129.8	326	146.00	27.94	49.36	15.54	27.45
Wyoming		76.7	130.4	169.9	33.9	16.0	123.6	265	128.70	23.44	34.94	13.79	20.59
Colorado	5.7	72.9	134.3	184.2	26.8	15.8	134.5	416	146.12	28.44	49.07	15.44	26.54
Arizona	23.0	66.3	112.7	170.0	39.6	14.0	126.4	280	102.70	18.13	23.89	10.60	14.05
Utah	5.2	79.4	130.9	175.0	34.6	10.9	124.5	448	103.73	20.00	37.74	11.43	21.57
Idaho	10.3	73.5	128.6	175.0	35.3	18.6	131.7	433	88.55	21.11	41.00	12.06	23.43
Washington	5.9	76.3	144.1	188.8	34.3	13.6	121.4	370	134.61	22.03	60.49	11.67	26.74
Oregon	11.3	78.0	148.7	190.3	34.7	16.1	137.3	490	114.86	19.16	76.80	10.07	29.65
California	20.8	76.3	143.7	188.5	34.3	27.5	125.7	372	153.64	27.77	40.39	14.68	21.43

TABLE 4.—*Summarized statistics of schools in cities of over 8,000 inhabitants, by divisions, etc., from 1890–91 to 1904–5, inclusive.*

Cities of—	Number of city school systems.	Enrollment in public day schools.	Aggregate number of days' attendance of all pupils.	Average daily attendance.	Number of supervising officers.	Number of teachers.			Number of school buildings.	Number of seats or sittings for study.	Value of public property used for school purposes.	Expenditure for supervision and teaching.	Expenditure for all purposes.	Enrollment in private and parochial schools (largely estimated).
						Men.	Women.	Total.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
United States:														
1890–91	442	2,627,275	364,687,603	1,884,474	2,463	3,874	48,557	52,431	6,478	2,396,674	$184,507,058	$33,266,128	$56,936,447	723,000
1891–92	459	2,743,430	378,389,408	1,977,442	2,724	3,944	51,113	55,057	6,787	2,512,772	193,607,787	35,372,482	60,555,120	753,178
1892–93	473	2,876,806	394,017,038	2,066,850	2,894	4,298	54,224	58,522	6,967	2,693,522	205,338,077	37,317,838	65,981,388	775,910
1893–94	554	3,126,659	436,806,735	2,281,237	3,374	4,752	58,246	62,999	7,743	2,998,295	228,439,334	40,417,650	69,886,413	820,250
1894–95	574	3,302,841	462,450,038	2,431,967	3,685	5,023	61,970	66,993	8,106	3,119,277	236,631,394	44,155,706	74,721,332	842,555
1895–96	602	3,480,619	489,786,705	2,560,293	3,936	5,059	65,266	70,325	8,496	3,369,082	255,586,583	46,747,865	80,042,118	845,760
1896–97	602	3,594,675	507,622,259	2,693,299	3,998	5,773	68,344	74,117	8,604	3,383,405	267,425,289	48,772,485	84,866,092	824,600
1897–98	626	3,803,049	539,141,947	2,849,502	4,429	6,005	72,355	78,360	9,113	3,500,970	289,325,794	52,064,649	88,773,647	872,408
1898–99	632	3,920,467	550,909,973	2,931,679	4,590	6,302	76,348	82,650	9,367	3,635,486	312,698,690	55,689,787	93,413,046	913,389
1899–1900	568	3,949,581	553,118,781	2,946,978	4,742	6,319	77,310	83,629	9,190	3,665,313	322,777,996	59,183,560	99,457,234	939,337
1900–1901	582	4,090,819	572,033,844	3,054,307	4,733	6,629	80,932	87,561	9,374	3,799,092	341,074,032	63,433,167	107,663,785	897,099
1901–2	580	4,174,812	591,719,445	3,159,441	5,025	6,969	83,775	90,744	9,512	3,938,001	358,986,076	66,561,505	111,159,065	877,210
1902–3	587	4,270,473	609,811,464	3,249,554	5,373	7,274	86,782	94,056	9,853	4,092,077	380,437,679	70,183,871	122,233,724	967,535
1903–4	588	4,374,463	630,662,698	3,354,806	5,619	7,289	89,335	96,624	10,069	4,151,938	410,330,528	74,332,482	129,636,203	1,008,552
1904–5	594	4,506,678	651,970,275	3,434,323	5,729	7,769	92,417	100,186	10,179	4,318,319	424,859,805	78,328,420	139,417,318	1,012,380
North Atlantic Division:														
1890–91	186	1,295,627	181,981,849	914,246	1,179	1,702	24,353	26,055	3,164	1,170,477	93,319,620	16,560,417	27,952,437	345,019
1891–92	191	1,333,698	185,030,311	950,395	1,262	1,687	25,438	27,125	3,219	1,231,862	97,070,586	17,330,426	30,065,635	354,355
1892–93	195	1,377,806	190,042,037	981,290	1,385	1,931	26,549	28,480	3,323	1,287,123	103,172,091	18,104,963	31,678,701	358,624
1893–94	219	1,492,594	209,650,142	1,075,938	1,516	1,984	27,782	29,766	3,663	1,376,385	111,843,026	19,203,607	33,306,973	379,402
1894–95	221	1,561,950	221,016,405	1,134,394	1,586	2,048	29,563	31,601	3,779	1,438,671	116,128,291	20,919,163	36,496,063	385,022
1895–96	233	1,639,631	232,118,588	1,186,738	1,769	2,026	30,744	32,770	3,952	1,515,887	125,616,040	22,294,477	40,754,870	373,689
1896–97	233	1,697,515	240,131,134	1,259,044	1,829	2,351	32,370	34,721	4,017	1,595,508	135,970,151	23,274,845	44,418,713	360,779
1897–98	236	1,785,788	256,708,172	1,329,002	2,006	2,396	34,341	36,727	4,268	1,626,891	149,529,294	25,130,926	48,088,195	401,655
1898–99	249	1,877,305	266,549,111	1,403,875	2,161	2,732	37,031	39,763	4,496	1,719,183	162,833,646	27,571,736	49,575,675	433,696
1899–1900	240	1,929,523	273,129,266	1,430,914	2,228	2,827	38,293	41,120	4,586	1,776,933	175,888,128	30,978,507	55,499,727	480,864
1900–1901	244	1,986,916	280,589,375	1,477,935	2,221	3,058	39,856	42,914	4,586	1,834,204	187,728,075	33,772,007	60,894,290	419,349
1901–2	242	2,040,001	289,832,744	1,537,500	2,567	3,145	41,257	44,402	4,662	1,927,144	190,857,570	35,543,105	59,950,666	380,276
1902–3	242	2,068,408	299,421,370	1,584,309	2,546	3,321	42,950	46,271	4,765	1,974,960	202,004,065	37,589,437	67,303,670	450,760
1903–4	242	2,132,257	310,081,638	1,632,457	2,697	3,390	44,056	47,446	4,894	2,037,620	223,040,878	39,659,919	70,617,085	478,218
1904–5	243	2,201,442	321,595,506	1,691,008	2,741	3,611	45,528	49,139	4,930	2,150,507	224,117,088	41,640,361	77,436,281	480,570

TABLE 4.—*Summarized statistics of schools in cities of over 8,000 inhabitants, by divisions, etc., from 1890-91 to 1904-5, inclusive*—Continued.

Cities of—	Number of city school systems.	Enrollment in public day schools.	Aggregate number of days' attendance of all pupils.	Average daily attendance.	Number of supervising officers.	Number of teachers.			Number of school buildings.	Number of seats or sittings for study	Value of public property used for school purposes.	Expenditure for supervision and teaching.	Expenditure for all purposes.	Enrollment in private and parochial schools (largely estimated).
						Men.	Women.	Total.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
South Atlantic Division:														
1890-91	37	192,820	27,756,177	148,831	110	411	3,462	3,873	460	180,727	$8,577,207	$2,147,476	$3,278,942	50,601
1891-92	38	212,962	29,238,310	153,325	142	450	3,660	4,110	459	186,960	8,908,588	2,208,220	3,537,564	45,968
1892-93	38	218,872	28,840,107	154,789	166	440	3,928	4,368	451	206,001	10,048,445	2,497,697	3,475,077	49,901
1893-94	40	224,400	30,078,691	160,571	190	479	3,980	4,459	491	209,365	11,055,116	2,574,429	3,643,467	52,069
1894-95	43	239,274	31,973,121	173,893	183	580	4,335	4,925	594	221,787	10,409,404	2,756,147	3,790,520	51,946
1895-96	43	251,462	33,684,190	178,289	223	529	4,517	5,046	672	228,579	10,980,232	2,932,741	4,119,613	51,949
1896-97	43	254,737	34,366,949	184,529	229	500	4,744	5,304	662	246,612	11,063,166	3,015,502	4,202,826	47,392
1897-98	47	272,108	36,536,809	197,106	278	597	4,968	5,565	643	250,248	11,335,220	3,109,020	4,300,345	48,164
1898-99	46	273,245	35,208,601	192,029	295	574	5,027	5,601	637	253,015	13,342,026	3,278,909	4,560,947	46,112
1899-1900	43	271,888	35,144,610	197,334	291	543	5,023	5,566	662	257,263	12,869,707	3,310,268	4,692,118	47,863
1900-1901	44	298,904	37,844,818	209,138	248	601	5,405	6,006	685	263,942	14,180,759	3,386,842	4,961,133	40,547
1901-2	44	292,143	37,412,610	205,948	305	651	5,445	6,096	693	263,612	14,498,331	3,436,613	5,308,312	42,188
1902-3	45	301,386	38,894,925	214,659	341	634	5,622	6,256	730	274,998	16,580,537	3,610,175	5,724,627	45,801
1903-4	45	297,272	39,584,601	217,325	310	583	5,774	6,357	735	279,747	16,399,817	3,845,243	5,371,379	51,995
1904-5	45	295,446	39,829,196	218,436	332	581	5,715	6,296	707	280,530	16,611,349	3,933,805	5,547,287	51,015
South Central Division.														
1890-91	37	148,798	18,061,842	106,044	172	299	2,287	2,586	359	122,353	7,803,089	1,523,392	2,210,881	48,909
1891-92	39	153,625	19,857,366	107,023	170	283	2,493	2,776	370	130,118	7,705,290	1,637,110	2,300,369	48,908
1892-93	41	164,057	21,967,115	119,229	136	361	2,727	3,088	397	150,270	7,946,424	1,884,400	2,579,273	47,831
1893-94	48	171,386	23,010,276	127,585	173	386	3,030	3,416	436	149,876	9,144,329	1,990,857	2,866,737	48,730
1894-95	51	181,464	22,808,432	126,260	248	379	3,130	3,509	470	164,064	9,247,543	2,110,907	2,965,790	42,113
1895-96	53	190,366	24,580,505	138,250	247	403	3,267	3,670	485	191,730	9,207,437	2,188,338	3,103,570	48,008
1896-97	53	193,874	25,398,620	142,592	204	442	3,296	3,738	464	183,008	9,292,814	2,143,725	2,776,576	47,376
1897-98	54	203,700	25,997,085	149,027	230	486	3,540	4,026	587	187,602	10,196,218	2,251,220	2,994,613	49,989
1898-99	55	210,843	26,608,689	150,907	204	489	3,663	4,152	594	187,277	10,720,065	2,345,240	3,149,791	48,795
1899-1900	50	209,706	27,340,326	151,536	205	458	3,816	4,074	620	186,544	10,328,769	2,309,223	3,343,566	41,872
1900-1901	51	218,549	28,581,684	159,407	208	474	3,892	4,366	553	190,369	11,005,793	2,401,700	3,230,321	41,478
1901-2	51	223,538	30,447,823	167,816	197	501	4,070	4,590	558	205,833	11,467,366	2,463,209	3,539,953	44,438
1902-3	52	231,985	30,895,192	171,276	197	517	4,268	4,785	566	218,810	12,411,860	2,683,020	4,046,743	45,723
1903-4	52	243,977	32,138,006	178,689	222	510	4,562	5,072	587	226,796	13,332,465	2,800,879	4,356,941	61,766
1904-5	53	252,567	33,571,545	186,119	242	536	4,613	5,149	605	236,138	14,294,791	3,167,719	4,398,227	65,900
North Central Division:														
1890-91	**155**	**854,615**	**117,701,800**	**621,409**	**548**	**1,239**	**16,095**	**17,334**	**2,119**	**804,538**	**60,731,616**	**10,845,838**	**19,114,726**	**250,668**
1891-92	**165**	**897,167**	**124,236,074**	**663,521**	**947**	**1,315**	**16,931**	**18,246**	**2,297**	**845,096**	**64,031,960**	**11,673,823**	**20,057,510**	**290,439**
1892-93	**179**	**940,861**	**125,208,816**	**708,158**	**960**	**1,343**	**18,200**	**19,542**	**2,362**	**915,185**	**67,085,336**	**12,600,781**	**22,980,728**	**296,981**

1893-94	213	1,005,535	150,775,205	795,120	1,203	1,551	20,300	21,920	2,635	1,014,675	77,061,101	13,962,787	25,309,773	315,168
1894-95	224	1,137,873	161,785,375	894,225	1,427	1,670	21,719	23,389	2,774	1,130,868	82,979,343	15,321,916	26,645,659	333,215
1895-96	237	1,208,248	173,257,180	918,318	1,423	1,775	23,310	25,085	2,878	1,206,310	90,802,530	16,179,769	27,144,150	339,768
1896-97	237	1,247,567	180,418,070	958,683	1,408	1,908	24,107	26,015	2,913	1,175,948	89,050,452	15,949,896	28,451,705	346,447
1897-98	250	1,324,003	190,890,600	1,016,647	1,657	2,046	25,467	27,513	3,047	1,240,682	88,836,750	17,874,721	27,781,626	350,403
1898-99	244	1,345,953	193,880,357	1,026,364	1,616	2,107	26,418	28,525	3,088	1,281,502	100,448,258	18,857,066	30,318,046	360,210
1899-1900	261	1,322,506	187,075,430	1,006,714	1,648	2,161	26,212	28,373	2,872	1,344,267	103,758,366	18,642,461	30,017,331	363,113
1900-1901	266	1,345,440	193,693,942	1,039,712	1,699	2,147	27,244	29,393	2,971	1,286,995	107,602,153	19,845,331	32,292,022	361,775
1901-2	265	1,371,396	200,145,207	1,066,804	1,675	2,339	28,050	30,389	3,016	1,319,453	116,489,304	20,729,418	35,112,402	380,198
1902-3	269	1,402,843	203,804,806	1,079,549	1,653	2,349	28,510	30,859	3,107	1,374,748	120,386,111	21,228,002	36,345,058	390,716
1903-4	211	1,422,503	208,644,145	1,112,683	1,653	2,357	29,106	31,533	3,118	1,386,490	128,321,379	22,626,382	40,037,112	371,624
1904-5	216	1,466,289	215,720,852	1,117,205	2,088	2,501	30,468	32,967	3,206	1,360,187	138,307,316	23,945,316	42,381,323	366,943
Western Division:														
1890-91	27	135,415	13,296,074	93,945	154	223	2,360	2,583	376	118,479	14,075,320	2,180,006	4,379,461	29,393
1891-92	26	145,988	20,027,817	103,178	208	209	2,591	2,800	412	128,723	15,891,263	2,462,807	4,594,052	23,808
1892-93	26	156,538	20,809,379	109,384	220	224	2,820	3,044	494	134,943	17,096,849	2,630,027	5,207,600	24,073
1893-94	34	171,723	23,296,531	122,013	227	353	3,085	3,438	498	147,896	18,435,703	2,935,970	4,660,473	24,861
1894-95	33	182,271	24,995,705	133,495	241	338	3,233	3,569	469	163,735	18,606,733	3,047,574	4,824,331	30,259
1895-96	30	190,863	26,146,236	138,718	276	326	3,433	3,764	539	176,508	18,999,934	3,152,540	4,860,009	24,405
1896-97	36	200,582	27,267,456	146,151	268	424	3,737	4,161	648	185,599	18,048,700	3,207,547	5,075,381	20,635
1897-98	39	217,351	29,003,481	157,000	299	461	4,039	4,530	678	190,287	19,430,372	3,694,706	5,518,908	22,132
1898-99	38	213,137	29,245,215	158,504	314	400	4,200	4,600	643	194,440	20,353,695	3,860,836	5,613,585	20,456
1899-1900	34	215,178	29,829,040	161,450	349	330	4,165	4,494	630	200,266	19,892,995	3,894,007	5,044,603	25,635
1900-1901	37	231,010	31,324,025	168,175	357	349	4,533	4,882	679	212,462	20,394,249	4,017,887	5,206,019	27,949
1901-2	38	241,732	33,830,663	181,373	381	338	4,994	5,332	683	222,459	21,073,415	4,366,072	7,138,792	30,130
1902-3	39	265,551	37,065,181	199,761	436	460	5,422	5,882	685	240,061	25,364,116	5,054,287	8,813,696	34,630
1903-4	38	278,389	40,214,206	213,642	457	459	5,737	6,216	735	271,339	28,031,987	5,240,969	9,433,686	42,649
1904-5	38	290,932	41,253,674	221,495	476	540	6,075	6,615	731	281,857	31,496,251	5,701,219	9,656,201	47,963

TABLE 5.—*Comparative statistics of cities containing over 8,000 inhabitants, summarized by divisions, etc., 1891–1905.*

Cities of—	Ratio of private school enrollment to enrollment in all schools, public and private.	Ratio of average attendance to enrollment (public schools).	Average number of days' attendance of each pupil enrolled.	Average length of school term	Average number of pupils in attendance to each teacher.	Average number of teachers to each supervising officer.	Average number of seats to each 100 pupils in attendance.	Average number of seats to a building.	Value of school property per capita of pupils in average attendance.	Cost of teaching and supervision per capita of pupils in average attendance.	Total cost of schools per capita of pupils in average attendance.	Average cost per day of tuition for one pupil.	Average daily expenditure per pupil for all purposes.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
United States[1]	*Per cent*	*Per cent.*	*Days*	*Days.*								*Cents.*	*Cents.*
1891-92	21.5	72.1	137.9	191.5	35.9	20.2	126.5	371	$97.92	$16.83	$28.80	8.79	15.04
1892-93	21.2	71.9	137.0	190.6	35.3	20.2	130.3	387	99.32	18.29	31.92	9.60	16.75
1893-94	20.8	72.9	139.7	191.5	36.2	18.7	127.1	374	100.15	17.85	30.64	9.32	16.00
1894-95	20.3	73.6	140.0	190.1	36.3	18.2	128.3	385	97.30	18.16	30.72	9.55	16.16
1895-96	19.6	73.5	140.7	191.4	36.4	17.9	131.6	397	99.84	18.26	31.26	9.54	16.34
1896-97	18.7	74.9	141.2	188.5	36.3	18.5	126.7	396	99.30	18.11	31.51	9.61	16.72
1897-98	18.7	74.9	141.8	189.2	36.4	17.7	122.9	394	101.55	18.27	31.16	9.66	16.47
1898-99	18.9	74.8	140.5	187.9	35.5	18.0	124.0	388	106.65	18.99	31.86	10.11	16.96
1899-1900	19.1	74.6	140.3	187.7	35.2	17.8	124.4	399	109.53	20.10	33.78	10.70	17.99
1900-1901	18.0	74.7	139.8	187.3	34.9	18.5	124.4	405	111.67	20.77	35.25	11.09	18.82
1901-2	17.4	75.7	141.7	187.3	34.8	18.1	124.7	414	112.99	21.07	35.18	11.25	18.70
1902-3	18.5	75.1	142.8	187.7	34.5	17.5	125.9	415	117.07	21.60	37.62	11.51	20.04
1903-4	18.7	76.7	144.2	187.9	34.7	17.2	123.8	412	122.31	22.16	38.70	11.71	20.60
1904-5	18.5	76.2	144.7	189.8	34.3	17.5	125.7	424	123.70	22.81	40.59	12.01	21.33
North Atlantic Division:													
1891-92	21.0	71.1	138.5	194.7	35.0	21.5	128.5	383	102.25	18.23	31.63	9.37	16.24
1892-93	20.7	71.2	138.0	193.7	34.5	20.6	131.2	388	105.15	18.45	32.28	9.52	16.07
1893-94	20.3	72.1	140.4	194.8	36.1	18.8	127.9	374	103.95	17.93	30.95	9.20	15.89
1894-95	19.8	72.6	141.5	194.8	35.9	19.9	126.8	381	102.37	18.44	32.17	9.46	16.51
1895-96	18.5	72.4	141.5	195.6	36.2	18.5	127.7	384	106.85	17.93	34.34	9.60	17.56
1896-97	17.5	74.2	141.5	190.7	36.3	19.0	127.8	401	107.98	18.49	35.29	9.69	18.50
1897-98	18.4	74.5	143.8	193.0	36.2	17.8	122.4	381	112.45	18.90	36.17	9.79	18.73
1898-99	18.8	74.8	141.9	189.9	35.3	18.4	122.5	382	116.00	19.64	35.31	10.35	18.61
1899-1900	18.9	74.2	141.6	190.9	34.8	18.4	124.2	387	122.92	21.65	38.80	11.34	20.32
1900-1901	17.4	74.4	140.5	189.9	34.4	19.3	124.1	400	127.02	22.85	41.20	12.04	21.70
1901-2	15.7	75.2	141.7	188.4	34.6	17.3	125.3	411	124.14	23.12	38.99	12.27	20.69
1902-3	17.9	76.6	144.8	189.0	34.2	18.2	124.7	414	127.50	23.73	42.48	12.55	22.48
1903-4	18.3	76.6	145.4	189.9	34.4	17.6	124.8	416	136.63	24.29	43.26	12.79	22.78
1904-5	17.6	76.8	146.1	190.2	34.4	17.9	127.2	426	132.53	24.62	45.79	12.94	24.07
South Atlantic Division:													
1891-92	17.8	72.0	137.3	190.7	37.3	28.9	121.9	407	56.37	14.79	23.08	7.75	12.10
1892-93	18.6	70.7	131.7	188.3	35.4	26.3	133.1	457	64.90	16.14	22.45	8.66	12.05

1893-94	12.12	8.56	22.60	16.03	68.85	426	130.4	23.5	36.0
1894-95	11.86	8.62	21.64	15.88	60.31	373	127.8	26.9	35.2
1895-96	12.23	8.71	23.10	16.45	61.49	340	128.2	22.6	35.3
1896-97	12.23	8.77	22.74	16.31	59.86	373	133.4	23.1	34.8
1897-98	12.02	8.51	22.26	15.77	57.49	389	126.8	20.0	35.4
1898-99	12.93	9.31	23.70	17.08	60.50	397	131.8	19.0	34.3
1899-1900	13.35	9.44	23.77	16.82	65.22	377	130.3	19.1	36.3
1900-1901	13.08	8.95	23.67	16.19	67.81	385	126.2	24.4	34.8
1901-2	14.43	9.19	26.21	16.80	70.40	390	128.0	20.7	33.6
1902-3	14.72	9.31	26.67	16.86	77.25	377	128.1	18.4	34.3
1903-4	13.57	9.71	24.72	17.69	75.46	385	128.7	20.5	34.1
1904-5	13.93	9.88	25.39	18.01	76.08	397	128.4	18.9	34.7
1891-92	11.58	8.25	21.50	15.30	72.01	324	112.2	16.4	38.5
1892-93	11.74	8.58	21.62	15.81	66.73	379	126.0	22.4	38.6
1893-94	12.46	8.48	22.42	15.65	71.67	344	117.6	19.7	37.3
1894-95	13.00	9.26	23.49	16.72	73.24	349	130.0	14.1	36.0
1895-96	12.87	8.88	22.87	15.79	66.60	412	138.6	18.7	37.8
1896-97	10.93	8.40	19.47	14.96	65.17	394	128.3	18.3	38.1
1897-98	11.52	8.66	20.10	15.10	68.40	320	125.9	17.5	37.0
1898-99	11.92	8.83	20.94	15.51	71.03	315	124.1	20.4	36.4
1899-1900	12.23	8.46	22.07	15.24	68.17	361	123.1	19.8	37.2
1900-1901	11.30	8.40	20.26	15.07	69.06	361	125.1	21.0	36.5
1901-2	11.62	8.15	21.09	14.80	68.33	368	122.4	23.2	36.6
1902-3	13.10	8.68	23.63	15.66	72.47	396	127.5	24.3	35.8
1903-4	13.56	9.00	24.38	16.18	74.61	396	126.9	22.8	35.2
1904-5	13.09	9.25	23.62	16.00	76.80	390	126.9	21.1	36.2
1891-92	16.14	9.40	30.21	17.63	96.50	368	127.4	19.3	36.4
1892-93	17.37	9.53	32.73	17.95	95.54	388	130.4	19.8	35.9
1893-94	16.85	9.26	31.93	17.56	98.05	385	127.6	17.3	36.3
1894-95	16.47	9.47	30.83	17.73	96.01	408	130.9	16.4	37.0
1895-96	15.67	9.34	29.55	17.62	98.90	437	136.8	17.6	36.6
1896-97	15.74	9.41	29.62	17.71	97.06	403	122.3	17.8	36.6
1897-98	14.55	9.37	27.33	17.59	97.23	410	122.6	17.7	37.0
1898-99	15.78	9.74	29.73	18.35	102.75	415	124.9	17.6	36.1
1899-1900	15.98	9.93	29.81	18.51	103.07	433	123.6	17.2	35.5
1900-1901	16.67	10.22	31.06	19.05	103.46	434	124.0	17.3	35.4
1901-2	17.54	10.35	32.91	19.43	109.20	437	123.7	18.1	35.1
1902-3	17.86	10.44	33.67	19.67	114.48	442	127.3	16.6	35.0
1903-4	19.20	10.88	36.00	20.40	115.50	428	120.1	16.3	35.3
1904-5	19.16	11.09	37.00	21.42	123.85	427	122.6	16.2	33.9
South Central Division:									
1891-92					71.6		134.0		187.3
1892-93					72.5		133.6		184.2
1893-94					70.9		133.9		189.0
1894-95					72.6		134.9		185.9
1895-96					72.5		134.3		185.3
1896-97					70.3		128.9		183.4
1897-98					72.6		129.2		178.1
1898-99					70.0		126.6		181.0
1899-1900					70.5		128.1		181.7
1900-1901					71.2		129.1		181.2
1901-2					73.3		133.2		182.1
1902-3					70.9		134.8		182.3
1903-4					70.7		131.2		185.5
1904-5					72.7		133.9		184.2
North Central Division:									
1891-92					74.4		134.9		180.4
1892-93					69.6		125.6		180.6
1893-94					72.7		129.2		177.8
1894-95					73.6		131.0		178.2
1895-96					73.2		127.6		174.4
1896-97					71.6		125.8		175.6
1897-98					72.3		130.4		180.5
1898-99					72.9		130.8		179.3
1899-1900					75.4		136.2		181.5
1900-1901					73.8		133.2		180.4
1901-2					73.2		131.7		179.8
1902-3					73.7		132.9		180.4
1903-4					74.0		138.5		187.3
1904-5					73.2		137.8		188.4
					74.6		141.4		180.6
					76.0		142.2		187.2
					76.0		143.4		188.6
					76.8		144.6		188.2
					76.8		144.2		187.8
					76.2		143.7		188.5
					76.1		142.7		186.4
					77.3		144.0		186.3
					77.8		146.0		187.6
					77.0		145.1		188.5
					78.2		146.7		187.5
					76.2		147.8		193.1
North Central Division:									
1891-92									197.3
1892-93									188.4
1893-94									180.6
1894-95									187.2
1895-96									188.6
1896-97									188.2
1897-98									187.8
1898-99									188.5
1899-1900									186.4
1900-1901									186.3
1901-2									187.6
1902-3									188.5
1903-4									187.5
1904-5									193.1

1893-94	18.8	30.4	24.4	16.6	23.8	22.7	21.8	20.7	20.1
1894-95	17.8	30.9	22.5	16.5	23.6	22.5	21.8	20.9	21.1
1895-96	17.1	30.3	21.1	20.2	22.8	22.5	21.8	20.9	21.1
1896-97	15.7	30.6	18.8	20.6	22.8	22.7	21.8	20.9	21.5
1897-98	15.0	30.1	20.1	23.8	23.6	22.8	21.8	20.9	21.2
1898-99	14.4	30.4	19.6	23.6	22.8	22.7	21.8	20.9	21.7
1899-1900	15.0	30.4	19.7	23.8	22.8	22.5	21.8	20.9	21.8
1900-1901	13.5	30.4	18.2	23.6	22.8	22.5	21.8	20.9	20.7
1901-2	12.6	30.4	16.6	23.6	22.8	22.5	21.8	20.9	20.1
1902-3	13.2	30.4	15.9	23.6	22.8	22.5	21.8	20.9	20.1
1903-4	14.9	30.4	16.6	23.6	22.8	22.5	21.8	20.9	20.1
1904-5	14.7	30.4	16.5	23.6	22.8	22.5	21.8	20.9	20.1

TABLE 5.—*Comparative statistics of cities containing over 8,000 inhabitants, summarized by divisions, etc., 1891–1905*—Continued.

Cities of	Ratio of private school enrollment to enrollment in all schools, public and private.	Ratio of average attendance to enrollment (public schools).	Average number of days' attendance of each pupil enrolled.	Average length of school term.	Average number of pupils in attendance to each teacher.	Average number of teachers to each supervising officer.	Average number of seats to each 100 pupils in attendance.	Average number of seats to a building.	Value of school property per capita of pupils in average attendance.	Cost of teaching and supervision per capita of pupils in average attendance.	Total cost of schools per capita of pupils in average attendance.	Average cost per day of tuition for one pupil.	Average daily expenditure per pupil for all purposes.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Western Division:	*Per cent.*	*Per cent*	*Days.*	*Days.*								*Cents*	*Cents.*
1891-92	13.9	70.7	137.1	194.1	36.9	13.8	124.8	312	$154.00	$23.87	$44.82	12.20	22.95
1892-93	13.3	69.9	133.5	191.1	35.9	13.8	123.4	318	156.23	24.05	48.16	12.59	25.21
1893-94	12.7	71.1	135.6	190.8	36.5	16.1	121.3	307	151.07	24.07	38.28	12.61	20.06
1894-95	14.2	73.2	136.4	186.3	37.4	14.9	122.7	336	133.40	22.83	36.14	12.26	19.40
1895-96	11.3	72.5	136.9	189.4	36.9	13.6	127.2	334	136.96	22.72	35.02	12.06	18.58
1896-97	9.3	73.5	136.0	184.9	35.5	16.5	125.2	339	121.83	22.73	34.25	12.34	18.60
1897-98	9.2	72.3	133.4	184.5	34.1	14.8	121.2	329	123.70	23.52	35.14	12.74	19.00
1898-99	11.0	74.4	137.3	184.7	34.4	14.7	122.7	352	124.40	23.10	35.43	12.51	19.19
1899-1900	10.6	74.3	138.2	185.9	35.7	12.5	124.8	379	124.20	24.51	36.79	13.19	19.79
1900-1901	10.8	72.8	135.6	186.3	34.4	13.7	120.4	367	122.46	24.19	37.44	12.96	20.10
1901-2	11.1	75.0	140.0	186.5	34.2	13.9	122.7	382	130.53	24.09	39.47	12.91	21.16
1902-3	11.5	75.1	139.5	185.7	34.0	13.5	124.7	364	129.43	25.30	44.12	13.03	23.76
1903-4	13.3	76.8	144.5	188.2	34.4	13.6	127.0	389	135.89	24.83	44.16	13.03	23.46
1904-5	14.1	76.1	141.8	186.2	33.5	17.6	127.3	385	142.98	25.74	44.39	13.72	23.84

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5.*

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated).	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	ALABAMA.											
1	Anniston*	9,695	10,905	7–21	5,134	350	628	677	1,305	171	138,549	819
2	Birmingham	38,415	44,640	7–21	13,858	1,200	3,021	3,405	6,426	178	[a] 794,058	4,461
3	Huntsville	8,068	8,103	7–21	2,500	[a] 400	501	520	1,021	180	[a] 130,500	725
4	Mobile	38,469	42,164	7–21	12,396	2,987	2,428	2,678	5,106	176	[a] 718,256	4,061
5	Montgomery	30,346	39,769	7–21	8,856	.....	2,049	2,384	4,433	172	558,923	3,205
6	Selma	8,713	11,902	6–21	4,237	300	566	716	1,282	160	149,400	930
	ARIZONA.											
7	Tucson	7,531	.....	6–21	3,000	500	900	770	1,670	170	188,153	1,107
	ARKANSAS.											
8	Fort Smith	11,587	23,327	6–21	5,334	300	1,539	1,643	3,182	180	418,327	2,324
9	Hot Springs	9,973	10,918	6–21	5,398	200	1,520	1,637	3,157	180	468,000	2,600
10	Little Rock*	38,307	38,716	6–21	13,384	850	2,491	2,872	5,353	175	702,266	3,976
11	Pine Bluff	11,496	12,875	6–21	4,270	429	1,163	1,465	2,628	180	315,000	1,750
	CALIFORNIA.											
12	Alameda	16,464	19,114	5–17	4,182	271	1,702	1,817	3,570	190	524,232	2,758
13	Berkeley	13,214	18,600	5–17	4,840	426	2,100	2,272	4,462	190	711,104	3,701
14	Eureka	7,327	.....	5–17	2,367	27	1,014	975	1,989	188	295,970	1,575
15	Fresno	12,470	13,295	5–17	4,117	100	1,972	1,986	3,958	177	526,953	2,998
16	Los Angeles	102,479	[b] 121,067	5–17	39,064	4,241	16,960	17,072	34,032	189	4,631,086	24,504
17	Oakland	66,960	72,670	5–17	17,316	2,467	6,345	6,607	12,952	192	1,907,783	9,828
18	Pasadena	9,117	13,737	5–17	4,023	370	1,922	2,194	4,156	168	526,002	3,135
19	Riverside	7,973	.....	5–17	2,206	0	984	969	1,953	170	266,036	1,564
20	Sacramento	29,282	30,732	5–17	6,056	630	2,964	2,749	5,713	186	811,518	4,363
21	San Diego	17,700	18,900	5–17	3,991	370	1,847	1,779	3,626	[c] 109	460,703	2,707
22	San Francisco	342,782	364,677	5–17	97,353	24,646	24,536	24,244	48,780	[a] 193	7,206,363	37,609
23	San Jose	21,500	23,220	5–17	5,346	740	2,016	1,804	3,820	194½	659,983	3,579
24	Stockton	17,506	19,046	5–17	3,555	328	1,457	1,622	3,079	190	453,222	2,388
25	Vallejo	7,965	.....	5–17	1,693	420	990	972	1,962	187	204,570	1,094

* Statistics of 1903–4. [a] Approximately. [b] Estimate of 1904. [c] High school, 179 days.

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated).	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	COLORADO.											
26	Colorado Springs	21,085	28,186	6-21	6,028	300	2,523	2,755	5,278	184	737,472	4,008
27	Cripple Creek	10,147	10,147	6-21	4,000	300	1,850	1,750	3,600	175	[a] 451,500	2,580
28	Denver	133,859	150,317	6-21	46,416	1,500	16,327	16,647	32,974	186	4,525,194	24,329
29	Leadville	12,455	13,490	6-21	2,685	500	746	805	1,551	185	225,745	1,214
	Pueblo											
30	District No. 1	28,157	30,457	6-21	5,914	247	1,510	1,680	3,190	181	381,675	2,108
31	District No. 20			6-21	7,314		2,055	2,319	4,374	179	525,902	2,938
	CONNECTICUT.											
32	Ansonia	12,681	13,851	4-16	3,604	192			2,628	194	431,344	2,226
33	Bridgeport	70,996	82,061	4-16	17,854	2,500	6,017	5,901	11,918	184	1,871,453	10,170
34	Bristol	9,643		4-16	2,462	306	1,049	970	2,019	185½	279,261	1,505
35	Danbury	19,474	16,537	6-15	4,904	1,133	1,290	1,410	2,700	190	446,500	2,350
36	Hartford	79,850	93,160	4-16	18,132	3,539			14,458	180	1,937,304	10,762
	Manchester											
37	Town schools	10,601	11,791	5-20	1,291	0			1,076	185	[a] 139,675	755
38	North district			4-16	1,592	0	871	905	1,776	186	248,664	1,337
39	Meriden	28,805	25,616	4-16	6,742	1,778			4,218	180	594,900	3,305
40	Middletown	9,589	9,879	4-16	2,189	600			1,482	176	217,254	1,234
41	Naugatuck	10,541	12,701	4-16	3,159		1,117	1,098	2,215	186½	306,401	1,637
42	New Britain	25,998	30,178	4-16	[b] 7,032	1,900	2,301	2,730	5,031	184	779,586	4,237
43	New Haven	108,027	119,027	4-16	25,047	2,937			20,661	200	3,404,400	17,022
44	New London	17,548	19,443	5-16	3,781	872			3,060	179	410,447	2,293
45	Norwalk	19,932		4-16	4,998	729	1,939	1,926	3,865	195	567,060	2,908
	Norwich											
46	Central district	17,251	19,637	4-16	1,563	400			1,191	189	173,313	917
47	West Chelsea district			4-16	1,141	91			1,080	192	148,392	763
48	Stamford	15,997	17,332	4-16	4,827	714	2,312	2,147	4,459	189½	576,908	3,044
49	Torrington	12,453	10,400	4-16	3,249	1,027			2,229	190	308,264	1,617
50	Vernon [b]	8,483		4-16	1,872	400				180		
51	Wallingford (Central district)	9,001										
52	Waterbury	45,859	60,109	4-16		2,467	4,680	4,624	9,304	195	1,403,766	7,198
53	Willimantic [c]	10,137		4-16	2,328	780			1,390	190		

	DELAWARE.												
54	Wilmington	76,508	83,860	6-21					11,009	180	1,509,834	8,366
	DISTRICT OF COLUMBIA.												
55	Washington	278,718	302,883	*6-17	*55,885	*6,000	d 24,231	d 26,999	d 51,230	d 181	d 7,347,876	d 40,596
	FLORIDA.												
56	Jacksonville c*	28,429	35,201	6-21			2,967	3,198	6,165	180	649,675	4,005
57	Key West	17,114	20,498	6-21	6,000	1,500	893	915	1,808	180	e 242,880	e 1,518
58	Pensacola*	17,747	20,747	6-21		500	1,336	1,440	2,785	110	194,150	1,765
59	Tampa	15,839	22,823	6-21	6,000	600	1,025	1,150	2,175	160	239,467	1,496
	GEORGIA.												
60	Athens	10,245	11,080	6-18	2,974	*350	741	951	1,692	173	200,083	1,156
61	Atlanta	89,872	102,702	6-18	22,583		6,604	7,719	14,323	187	2,154,034	11,518
62	Augusta	39,441	42,511	6-18	13,104	1,300	1,925	2,182	4,107	155	598,125	3,625
63	Brunswick f*	9,081	9,391	6-18	4,416	300	1,362	1,417	2,779	176	301,488	1,713
64	Columbus	17,614	17,769	6-18	5,329	400	1,457	1,897	3,354	175	490,000	2,800
65	Macon	g 50,473	52,518	6-18	6,529	1,000	2,693	3,094	5,787	185	1,070,595	5,298
66	Savannah	h 71,239	67,311	6-18	14,512	350	3,230	3,964	7,194	184	1,066,832	5,798
	IDAHO.												
67	Boise	5,957		6-21	3,040	300	1,338	1,348	2,686	175	345,500	1,974
	ILLINOIS.												
68	Alton	14,210	16,170	6-21	4,735	700	1,234	1,381	2,615	191	366,720	1,920
69	Aurora: East side	24,147	26,377	6-21	6,306	1,573	1,407	1,384	2,791	193	427,689	2,216
70	West side			6-21	1,781	25	724	760	1,484	191	216,905	1,133
71	Belleville	17,484	18,544	6-21	6,380	1,163	1,485	1,376	2,861	196	469,614	2,396
72	Bloomington	23,286	25,219	6-21	6,949	1,100	2,140	2,259	4,399	174	623,320	3,553
73	Cairo	12,566	13,686	6-21	4,397	299	1,078	1,264	2,342	183	346,235	1,892
74	Champaign	9,098	10,726	6-21	3,368	250	1,011	1,017	2,028	181	277,835	1,535
75	Chicago	1,698,575	1,990,750	6-21	465,452	71,707	142,161	140,185	282,346	194	45,063,190	231,769
76	Danville	16,354	18,679	6-21	4,602	586	1,463	1,544	3,007	190	494,266	2,601
77	Decatur	20,754	24,395	6-21	7,995		2,191	2,471	4,662	186	684,573	3,681
78	Dixon: City proper			6-21	1,789	250	460	500	960	175	132,477	757
79	North Dixon			6-21	619	20	281	308	589	177	71,150	403
80	East St. Louis	29,665	39,385	6-21	*14,491	1,812	3,309	3,253	6,562	187	769,679	4,145
81	Elgin	22,433	24,738	6-21	8,146	746	2,207	2,093	4,300	185	668,290	3,593
82	Evanston' District No. 74 (North Evanston i)	19,259	22,334	6-21	467				309	190	48,830	257
83	District No. 75			6-21	3,220	300	841	859	1,700	190	263,201	1,385
84	District No. 76 (South Evanston)			*6-21	*3,451	200	595	606	1,201	190	179,255	943

a Statistics of 1903-4.
b Approximately.
c Statistics of Rockville.
d Included in the town of Windham.
d From the Annual Report of the Board of Education, 1905.
e Statistics of Duval County.
f Statistics of Glynn county.
g Population of Bibb County.
h Population of Chatham County.
i From Biennial School Report of Cook County for 1903 and 1904.

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated)	Different pupils enrolled in public day schools.			Number of days the schools were actually in session	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	ILLINOIS—continued.											
85	Freeport	13,236	14,703	6-21	3,339	714	1,136	1,241	2,377	188	384,506	2,040
86	Galesburg	18,607	20,277	6-21	5,014	500	1,817	1,873	3,690	174	519,564	2,986
87	Jacksonville	15,078	16,148	6-21	3,833	.....	1,104	1,217	2,321	167	319,363	1,912
88	Joliet	29,353	31,713	6-21	11,667	2,194	2,775	2,630	5,405	185	800,315	4,326
89	Kankakee	13,595	15,380	6-21	5,439	845	1,007	1,080	2,087	183	311,259	1,701
90	Kewanee	8,382	10,287	6-21	3,214	400	1,374	1,381	2,755	173	362,063	2,092
91	Lasalle	10,446	10,741	6-21	3,738	936	702	633	1,335	193	197,632	1,024
92	Lincoln	8,962	10,660	6-21	3,500	*420	675	785	1,460	176	216,054	1,191
93	Mattoon	9,622	11,022	.....	.....	180	1,401	1,286	2,687	179	366,055	2,045
94	Moline	17,248	20,023	6-21	5,467	500	1,972	2,016	3,988	177	a 560,382	3,166
95	Monmouth	7,460	.....	6-21	2,326	.....	893	946	1,839	187	276,885	1,480
96	Ottawa	10,588	11,068	6-21	3,502	175	906	904	1,809	192	282,445	1,471
97	Pekin	8,420	9,455	6-21	2,640	130	759	833	1,592	176	257,587	1,501
98	Peoria	56,100	65,026	6-21	17,090	2,519	3,900	4,000	7,900	190	.....	.....
99	Quincy	36,252	38,632	6-21	13,641	2,775	2,319	2,721	5,040	200	a 730,600	3,653
100	Rockford	31,051	34,621	6-21	9,304	200	3,343	3,430	6,773	186	1,009,534	5,426
101	Rock Island	19,493	22,423	6-21	5,953	842	1,915	1,935	3,850	176	557,564	3,168
102	Springfield	34,159	38,234	6-21	11,621	2,639	3,410	3,496	6,905	190	1,039,992	5,426
103	Streator	14,079	16,504	6-21	4,584	669	.....	.....	2,387	182	357,005	1,961
104	Waukegan	9,426	11,661	6-21	.....	300	1,040	1,143	2,183	193	354,200	1,835
	INDIANA.											
105	Alexandria	7,221	.....	6-21	2,120	240	519	677	1,296	185	171,773	928
106	Anderson	20,178	24,898	6-21	6,470	275	1,961	1,943	3,924	180	574,380	3,191
107	Brazil	7,786	.....	6-21	2,500	180	897	966	1,863	176	254,408	1,439
108	Columbus	8,130	8,835	6-21	2,136	156	832	927	1,759	180	233,740	1,243
109	Elkhart	15,184	17,119	6-21	3,781	200	1,413	1,430	2,843	180	424,800	2,360
110	Elwood	12,950	18,185	6-21	4,148	400	1,400	1,400	2,800	178	.....	.....
111	Evansville	59,007	63,132	6-21	17,617	3,000	4,537	4,617	9,154	200	1,256,810	6,284
112	Fort Wayne	45,115	49,975	6-21	14,706	3,800	3,004	3,158	6,162	191	933,789	4,889
113	Hammond	*12,376	15,526	6-21	4,443	1,500	1,027	1,028	2,055	185	293,595	1,587
114	Huntington	9,491	10,541	6-21	2,746	*500	845	818	1,663	182	243,273	1,333

115	Indianapolis	169,164	212,198	6-21	45,117	.....	15,124	15,356	30,480	183	4,391,700	23,999
116	Jeffersonville	10,774	10,829	6-21	3,651	.....	913	988	1,901	180	263,475	1,480
117	Kokomo	10,609	11,784	6-21	3,477	125	1,288	1,439	2,727	178	389,464	2,188
118	Lafayette	18,116	19,051	6-21	5,945	*1,400	1,607	1,894	3,501	185	*383,580	*2,133
119	Logansport	16,204	17,844	.....	4,874	650	1,345	1,423	2,768	175	a395,500	2,260
120	Marion	17,327	23,056	6-21	6,906	200	2,140	2,186	4,326	177	538,257	3,041
121	Michigan City	14,850	16,985	6-21	5,189	.....	1,109	1,178	2,287	176	338,727	1,931
122	Muncie	20,942	26,201	6-21	*5,684	*475	1,983	2,154	4,137	180	539,640	2,998
123	New Albany	20,628	20,628	6-21	6,456	800	1,660	1,780	3,440	176	505,490	2,872
124	Peru	8,463	11,347	6-21	2,997	360	871	870	1,741	175	245,581	1,403
125	Richmond	18,226	19,436	6-21	4,812	550	1,467	1,501	2,968	186½	443,870	2,380
126	South Bend	35,999	43,204	6-21	13,117	2,693	2,792	2,741	5,533	180	739,080	4,106
127	Terre Haute	36,673	51,908	6-21	13,127	950	4,288	4,481	8,747	187	1,166,599	6,239
128	Vincennes	10,240	11,155	6-21	3,930	.....	1,149	1,164	2,313	189½	332,585	1,755
129	Wabash	8,618	9,723	6-21	2,391	0	940	1,011	1,960	177	294,712	1,666
130	Washington	8,551	9,796	6-21	2,608	*500	776	775	1,551	176	.....	.....
	IOWA.											
131	Boone	8,880	9,500	5-21	2,794	*247	1,087	1,042	2,130	176	307,799	1,747
132	Burlington	23,201	26,318	.....	*7,300	500	2,011	2,343	4,354	185	646,501	3,494
133	Cedar Rapids	25,656	25,759	5-21	8,223	561	.....	.....	5,742	177	815,616	4,606
134	Clinton	22,698	22,758	5-21	6,041	400	1,508	1,674	3,182	180	432,580	2,681
135	Council Bluffs	25,802	26,281	5-21	7,136	.....	2,631	2,900	5,531	175	734,109	4,207
136	Davenport	35,254	39,797	5-21	12,286	1,194	3,655	3,555	7,210	190	1,085,740	5,713
	Des Moines.											
137	Capital Park	62,139	75,626	5-21	940	12	405	428	833	178	110,163	a629
138	East Side			5-21	6,036	.....	2,031	2,135	4,166	174	553,150	3,197
139	West Side			5-21	14,932	.....	.....	.....	9,701	174	1,129,056	6,494
140	Dubuque	38,397	41,941	5-21	13,165	2,208	2,250	2,288	4,538	181	645,084	3,564
141	Fort Dodge	12,162	14,369	5-21	3,195	765	1,090	1,120	2,170	176	278,980	1,585
142	Fort Madison	9,278	8,767	5-21	2,678	.....	628	669	1,327	175	180,110	1,029
143	Iowa City*	7,987	.....	.....	2,003	.....	.....	.....	1,796	180	250,800	1,320
144	Keokuk	14,641	14,604	5-21	3,844	*338	1,058	1,166	2,224	172	313,384	1,822
145	Marshalltown	11,544	12,045	5-21	3,620	.....	1,331	1,418	2,749	176	360,404	2,047
146	Muscatine	14,073	15,087	5-21	4,607	400	1,442	1,468	2,911	190	424,270	2,233
147	Oskaloosa	9,212	10,203	5-21	*2,860	*50	1,123	1,153	2,276	176	300,045	1,705
148	Ottumwa	18,197	20,181	5-21	5,333	200	2,111	2,411	4,522	187½	621,544	3,315
149	Sioux City	33,111	40,952	5-21	13,896	1,000	4,949	4,942	9,891	174½	1,034,041	5,925
	Waterloo.											
150	East side	12,580	18,071	*5-21	*3,000	*300	985	1,043	2,028	176	265,408	1,506
151	West side			5-21	1,706	50	637	754	1,391	176	180,400	1,025
	KANSAS.											
152	Atchison	15,723	18,159	5-21	3,922	796	947	1,026	1,972	174	262,899	1,518
153	Emporia	8,223	8,974	5-21	2,750	200	940	1,091	2,040	177	285,324	1,612
154	Fort Scott	10,322	12,248	5-21	*4,805	100	1,140	1,180	2,330	160	269,426	1,682
155	Galena	10,155	6,449	5-21	1,835	.....	746	824	1,570	158	156,648	985
156	Hutchinson	9,379	11,215	5-21	2,815	150	1,085	1,192	2,277	173	318,609	1,821
157	Iola	5,791	.....	5-21	3,147	.....	1,325	1,451	2,776	175	364,844	2,082
158	Kansas City	51,418	67,614	5-21	17,086	.....	4,796	5,290	10,086	175½	1,313,438	7,482

*Statistics of 1903-4.

a Approximately.

TABLE 6.—*Statistics of population, school enrollment, and attenaance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated).	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	KANSAS—continued.											
159	Lawrence	10,862	11,708	5-21	3,904	*0	2,041	2,001	4,042	172	351,568	2,044
160	Leavenworth	20,735	20,934	5-21	6,695	750	1,600	1,600	3,200	180	462,780	2,571
161	Parsons	7,682	.....	5-21	3,195	200	1,065	1,178	2,243	a 166	285,145	1,719
162	Pittsburg	10,112	15,012	5-21	5,056	150	1,529	1,725	3,254	177	412,764	2,332
163	Topeka	33,608	37,641	5-21	10,665	700	3,432	3,740	7,172	180	1,024,200	5,690
164	Wichita	24,671	31,110	5-21	8.603	.....	2,764	3,095	5,859	176	800,300	4,525
	KENTUCKY.											
165	Bowling Green	8,226	8,386	*6-20	*2,330	120	660	685	1,345	184	155,952	853
166	Covington	42,938	45,877	6-14	18,770	4,325	2,489	2,559	5,048	185	708,162	3,828
167	Frankfort	9,487	10,287	6-21	2,534	300	734	850	1,584	195	212,366	1,085
168	Henderson	10,272	14,992	6-20	3,257	200	827	943	1,770	192	239,651	1,248
169	Lexington	26,369	28,769	6-20	10,130	500	2,195	3,221	5,416	190	710,060	3,737
170	Louisville	204,731	222,660	6-20	63,383	8,000	13,283	15,151	28,434	193	4,306,023	22,311
171	Newport	28,301	29,991	.....	.....	.....	.....	.....	.....	.....	.....	.....
172	Owensboro	13,189	14,250	6-20	4,460	500	1,542	1,830	3,372	181	371,231	2,051
173	Paducah	19,446	21,960	6-20	6,143	300	1,668	1,916	3,584	190	490,512	2,695
	LOUISIANA.											
174	Baton Rouge b	11,269	11,664	6-18	1,400	300	436	533	969	170	121,380	714
175	New Orleans	287,104	309,639	.....	96,343	.....	15,002	16,598	31,600	178	4,446,084	24,978
176	Shreveport	16,013	17,528	6-18	4,396	680	1,080	1,120	2,200	171	254,968	1,494
	MAINE.											
177	Auburn	12,951	13,801	5-21	3,818	350	924	1,002	1,926	180	288,270	1,601
178	Augusta	11,683	12,263	5-21	3,107	200	.....	.....	c1,608	c175	.....	.....
179	Bangor	21,850	23,225	5-21	6,245	715	1,684	1,914	3,598	171	554,724	3,244
180	Bath	10,477	11,352	5-21	2,975	0	.....	.....	2,096	*172	d295,324	1,717
181	Biddeford	16,145	16,995	5-21	5,865	2,000	.....	.....	1,579	176	187,968	1,068
182	Lewiston	23,761	24,791	5-21	7,911	1,480	1,488	1,267	2,755	175	369,960	2,114
183	Portland	50,145	54,330	5-21	14,957	.....	4,533	4,295	8,828	.....	.....	7,056

184	Rockland	8,150	8,150	5-21	1,978	0	734	878	1,612	148	220,372	1,499
185	Waterville	9,477	10,662	5-21	2,972	500	719	733	1,452	164	193,192	1,178
	MARYLAND.											
186	Annapolis	8,402	8,985	.....	.....	300	.....	.....	1,270	a200	150,175	914
187	Baltimore	508,957	546,217	.....	.....	.....	39,886	41,319	81,205	190	10,462,730	55,067
188	Cumberland	17,128	19,328	6-21	.....	.....	1,231	1,342	2,573	179	318,083	1,777
189	Frederick	9,296	9,548	6-21	.....	.....	809	902	1,711	177	213,108	1,204
190	Hagerstown	13,591	15,326	6-21	3,760	300	1,431	1,281	2,712	179	355,841	1,975
	MASSACHUSETTS.											
191	Adams	11,134	12,486	5-15	2,460	467	938	1,001	1,939	188	307,040	1,580
192	Amesbury	9,473	8,840	5-15	1,540	700	580	601	1,181	195	195,195	1,001
193	Arlington*	8,603	9,568	5-15	1,716	210	867	898	1,765	188	294,972	1,569
194	Attleboro	11,335	12,702	7-14	3,576	103	1,143	1,265	2,408	187	359,414	1,922
195	Beverly	13,534	15,223	5-15	2,596	37	1,449	1,495	2,944	195	476,970	2,446
196	Boston	560,892	595,380	5-15	100,307	16,090	52,330	50,550	102,880	189½	17 321,846	91,408
197	Brockton	40,063	47,794	7-14	5,464	.....	3,957	4,006	7,963	154½	*1 227,415	*6,781
198	Brookline	19,935	22,436	7-14	2,628	338	2,156	2,038	4,194	187	629,629	3,367
199	Cambridge	91,886	97,434	7-14	11,109	4,047	8,170	8,087	16,257	200	2 672,200	13,361
200	Chelsea	34,072	37,289	7-14	5,532	756	3,415	3,468	6,883	193	1,095,854	5,678
201	Chicopee	19,167	20,191	7-14	3,335	*949	.....	.....	2,576	195	440,238	2,257
202	Clinton	13,667	13,105	5-15	2,560	441	1,117	1,131	2,248	190	360,430	1,897
203	Danvers	8,542	9,063	5-15	1,376	6	839	801	1,640	f182	250,206	1,373
204	Everett	24,336	29,111	7-14	3,840	0	3,357	3,442	6,799	190	1,087,990	5,621
205	Fall River	104,863	105,762	5-15	20,493	5,542	8,147	7,779	15,926	192	2,397,120	12,485
206	Fitchburg	31,531	33,021	5-15	6,312	2,103	2,123	2,159	4,282	190	704,710	3,709
207	Framingham	11,309	11,548	5-15	1,811	.....	1,090	1,116	2,206	163½	332,502	1,812
208	Gardner	10,813	12,012	5-15	2,024	608	819	854	1,673	182	262,990	1,445
209	Gloucester	26,121	28,011	7-14	*3,262	263	2,457	2,501	4,958	193	840,322	4,354
210	Greenfield	7,927	.....	5-15	1,433	0	823	835	1,658	187	264,512	1,414
211	Haverhill	37,175	37,830	7-14	4,942	1,980	2,697	2,738	5,435	187	891,803	4,795
212	Holyoke	45,712	49,934	5-15	10,245	4,542	3,342	3,460	6,802	188½	1,024,535	5,419
213	Hyde Park	13,244	14,510	5-15	2,336	1,000	.....	.....	2,016	190	319,390	1,681
214	Lawrence	62,559	70,050	5-15	11,782	3,697	.....	.....	8,209	191½	1,331,117	6,951
215	Leominster	12,302	14,297	5-15	2,468	.....	.....	.....	2,242	.....	.....	1,888
216	Lowell	94,969	94,589	5-15	14,290	4,000	6,220	6,119	12,338	190	1,737,720	9,654
217	Lynn	68,513	77,042	5-15	.....	2,713	.....	.....	11,844	183	1,641,327	8,969
218	Malden	33,664	38,037	7-14	7,009	1,254	3,431	3,531	6,962	179	1,036,410	5,790
219	Marlboro	13,609	14,073	5-15	2,889	503	1,204	1,232	2,436	b181	392,770	2,170
220	Medford	18,244	19,686	7-14	2,592	70	2,209	2,174	4,383	191	675,682	3,537
221	Melrose	12,962	14,295	7-14	2,098	0	1,545	1,554	3,099	185	d 498,760	2,696
222	Milford	11,378	12,105	7-14	1,285	300	.....	.....	1,859	b170	275,801	1,609
223	Natick	9,488	9,609	7-14	1,141	0	.....	.....	1,500	180	.....	.....
224	New Bedford	62,442	74,362	5-15	12,586	2,918	5,061	5,020	10,081	192	1,540,608	8,024
225	Newburyport	14,478	14,675	5-15	2,471	520	1,111	1,096	2,207	200	373,200	1,866
226	Newton	33,587	36,827	5-15	5,972	455	3,236	3,446	6,682	180	956,034	5,311

* Statistics of 1903-4.
a High school, 176 days.
b Statistics for white schools only.
c From State school report, 1905.
d Approximately.
e Colored schools 75 days.
f Average.
g From annual report of the school committee, 1905.
h High school, 190 days.

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated).	Different pupils enrolled in public day schools			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	MASSACHUSETTS—continued.											
227	North Adams	24,200	22,150	5–15	4,799	1,504	1,841	1,919	3,760	187	532,763	2,849
228	Northampton	18,643	19,957	7–14	2,500	750	1,471	1,599	3,070	190	477,598	2,514
229	Peabody	11,523	13,098	7–14	1,614	505	1,130	892	2,022	190	318,136	1,674
230	Pittsfield	21,766	25,001	7–14	3,025	772	2,147	2,088	4,235	191	604,642	3,486
231	Plymouth	9,582	11,119	5–15	1,782	0	902	914	1,816	193	297,290	1,530
232	Quincy	23,899	28,076	5–15	6,059	280	2,903	2,887	5,790	180½	801,129	4,937
233	Revere	10,395	12,659	7–14	1,837	0	1,380	1,381	2,761	187	[a] 456,093	2,429
234	Salem	35,956	37,627	5–15	6,555	2,798	2,807	2,426	5,293	200	[a] 858,400	4,292
235	Somerville	61,643	69,272	7–14	8,300	1,549	6,002	6,117	12,119	186½	1,999,653	10,722
236	Southbridge	10,025	11,000	5–15	2,142	1,068	607	617	1,224	193	175,379	909
237	Springfield	62,059	73,540	5–15	11,735	1,822	6,866	6,295	13,161	191	1,907,300	10,300
238	Taunton	31,036	30,957	7–14	3,833	918	2,422	2,430	4,853	[b] 190	802,970	4,207
239	Wakefield	9,290	10,268	7–14	1,363	[c] 6	1,180	1,182	2,362	190	362,330	1,907
240	Waltham	23,481	25,282	5–15	3,912	[c] 1,435	1,616	1,684	3,300	189	471,345	2,494
241	Ware	8,263	8,594	5–15	1,566	402	641	627	1,268	190	191,400	1,021
242	Watertown	9,708	11,258	5–15	1,729	700	.....	.....	1,616	190	268,280	1,412
243	Webster	8,804	10,018	7–14	1,349	1,000	380	336	716	193	[a] 113,870	590
244	Westfield	13,310	13,011	5–15	2,213	262	1,172	1,132	2,304	[c] 185	357,740	1,909
245	Weymouth	11,324	11,585	7–14	1,531	0	1,190	1,226	2,416	188	359,832	1,914
246	Woburn	14,254	14,402	7–14	2,160	317	1,080	1,466	3,146	185	485,070	2,622
247	Worcester	118,421	128,135	7–14	16,134	4,201	11,269	10,901	22,170	200	3,571,520	17,857
	MICHIGAN.											
248	Adrian	9,654	10,937	5–20	2,600	400	872	895	1,767	190	253,080	1,331
249	Alpena	11,802	12,505	5–20	4,197	.....	.....	.....	1,948	188	285,008	1,516
250	Ann Arbor	14,509	14,622	5–20	3,299	300	1,279	1,198	2,477	184	386,305	2,099
251	Battle Creek	18,563	23,125	5–20	4,601	300	1,880	2,056	3,936	191	572,135	2,995
252	Bay City	27,628	[a] 40,614	5–20	9,506	2,500	2,270	2,340	4,610	189	703,042	3,719
253	Calumet school district	40,000	.....	5–20	7,780	1,000	2,941	2,868	5,809	195	980,733	5,029
254	Detroit	285,704	325,563	5–20	58,315	18,482	22,039	21,290	43,329	192	6,482,132	33,761
255	Escanaba	9,549	11,485	5–20	3,752	500	1,396	1,388	2,772	190	[a] 345,800	1,820
256	Flint	13,103	15,239	5–20	3,608	200	1,122	1,037	2,909	186	546,840	2,790
257	Grand Rapids	87,565	97,786	5–20	20,908	5,113	7,726	7,613	14,889	194	2,277,670	11,255

258	Holland	7,790		5-20	2,613	500	891	926	1,817	188	272,954	1,452
259	Iron Mountain	9,242	8,421	5-20	3,208	0	1,312	1,275	2,587	190	412,119	2,107
260	Ironwood	9,705	10,098	5-20	3,343	500	1,431	1,331	2,762	196	412,200	2,061
261	Ishpeming*	13,256	11,215	5-20	4,025	500	1,750	1,980	3,700	182	662,000	3,252
262	Jackson	25,180	25,330	5-20	8,877		1,623	1,996	3,819	a 200	616,108	3,081
263	Kalamazoo	24,404	31,127	5-20	6,549	600	2,668	2,716	5,404	182	791,773	4,350
264	Lansing	16,485	21,224	5-20	4,645	400	1,521	1,864	3,085	181	465,623	2,573
265	Manistee	14,200	12,320	5-20	4,361		1,170	1,286	2,456	196	383,572	1,957
266	Marquette	10,058	10,817	5-20	3,240	700	1,021	1,034	2,055	187	283,529	1,517
267	Menominee	12,318	10,665	5-20	b 4,437	588	1,331	1,329	2,660	189	366,770	2,129
268	Muskegon	20,818	20,917	5-20	7,042	682	2,891	2,793	5,674	189	647,325	3,425
269	Owosso	8,696	9,257	4-20		200			1,600	195	282,750	1,450
270	Pontiac	9,759	11,153	5-20	2,428	275	916	957	1,873	192	280,128	1,459
271	Port Huron	19,188	20,246	5-20	5,608	1,200	1,669	1,627	3,296	200	558,700	2,760
	Saginaw:											
272	East Side	42,345	47,676	5-20	8,332	400	2,361	2,452	4,813	193	764,473	3,961
273	West Side			5-20	5,678	1,000	1,500	1,720	3,220	197	512,200	2,600
274	Sault Ste. Marie	10,538	11,668	5-20	3,429	436	1,341	1,403	2,744	194	396,820	2,040
275	Traverse City	9,407	11,695	5-20	3,100	350	1,021	1,203	2,224	178	335,156	1,883
276	West Bay City	12,119	(f)	5-20	4,424	*780	1,215	1,159	2,374	196	367,608	1,838
	MINNESOTA.											
277	Brainerd	7,224		6-21		0			2,294	175	331,441	1,893
278	Duluth	52,969	64,943	5-21	13,000	1,000	5,845	5,824	11,669	196	1,858,211	9,529
279	Faribault	7,998		5-21	2,000	400			1,302	180	179,681	998
280	Mankato	10,599	10,996			*300			1,686	180	243,279	1,352
281	Minneapolis	202,718	261,974			*4,000	20,691	21,394	42,085	191	c6,689,171	35,022
282	St Cloud	8,663	9,422	5-21	2,531	978	527	721	1,248	176	184,765	1,049
283	St. Paul	163,065	197,023			13,500	13,032	14,752	27,804	190	4,215,939	22,169
284	Stillwater	12,318	12,435			600	809	1,009	1,878	175	301,876	1,725
285	Winona	19,714	20,334			1,200	1,894	1,479	3,373	190	516,743	2,711
	MISSISSIPPI.											
286	Jackson	7,816				250			2,271	180	280,440	1,558
287	Meridian	14,050	17,121	5-21	5,800	*850	1,410	1,576	2,986	170	324,660	1,910
288	Natchez	12,210	13,265	5-21		*1,400	843	973	1,816	180	207,180	1,151
289	Vicksburg*	14,834	16,564			786	877	1,254	2,131	180	349,068	1,939
	MISSOURI.											
290	Carthage	9,416	10,136	6-20	2,901	100	1,017	1,110	2,127	177	284,793	1,609
291	Hannibal	12,780	12,780	6-20	5,044	250	1,278	1,495	2,773	180	360,101	2,005
292	Jefferson City	9,664	11,124	6-20	2,929	e 350			1,407	180	e 155,040	e 1,023
293	Joplin	26,023	34,068	6-20	7,453	75	2,655	2,955	5,610	176	671,545	3,815
294	Kansas City	163,752	179,272	6-20	65,520	e 789	14,963	16,374	31,337	184	4,258,496	23,144
295	Moberly	8,012	8,012	6-20	3,840	e 0	810	847	1,657	178	226,255	1,283
296	St. Charles g	7,982		6-20	2,592	192			888	200	a 121,400	607
297	St. Joseph	102,979	115,479	6-20	36,805	1,800	5,647	5,980	11,627	178	1,464,762	8,229

* Statistics of 1903–4.
a Approximately.
b High school, 200 days.
c From 185 to 200 days.
d From State school report, 1904.
e Includes West Bay City, which united with Bay City April 1, 1905.
f See note e.
g From State school report, 1905.

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated).	Different pupils enrolled in public day schools.			Number of days the schools were actually in session	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	MISSOURI—continued.											
298	St. Louis	575,238	636,973	6-20	178,260	30,000	41,080	43,575	84,655	191	11,820,990	61,900
299	Sedalia	15,231	15,811	6-20	4,280	200	1,507	1,673	3,180	180	447,060	2,487
300	Springfield	23,267	23,977	6-20	7,776	500	3,082	3,304	6,386	180	738,420	4,108
301	Webb City	9,201	11,281	6-20	2,800	[a] 0	1,006	1,260	2,266	160	257,904	1,432
	MONTANA.											
302	Anaconda	9,453	11,798	6-21	2,498	.....	922	1,017	1,939	174	248,430	1,428
303	Butte	30,470	41,757	[b] 6-21	[b] 10,923	1,500	3,731	3,967	7,698	183	1,132,174	6,187
304	Great Falls	14,930	20,405	6-21	3,258	0	1,168	1,318	2,486	182	374,303	2,057
305	Helena	10,770	15,770	6-21	3,580	350	1,191	1,292	2,483	171½	324,380	1,891
	NEBRASKA.											
306	Beatrice	7,875	.....	5-21	2,986	125	968	1,063	2,031	176	277,024	1,574
307	Hastings	7,188	.....	5-21	4,216	340	1,086	1,152	2,238	175	325,500	1,830
308	Lincoln	40,169	46,874	5-21	13,868	.....	3,679	3,794	7,473	176	1,017,280	5,780
309	Omaha	102,555	120,565	5-21	29,330	3,000	9,578	9,272	18,850	185	2,706,550	14,630
310	South Omaha	26,001	34,971	5-21	6,743	631	2,497	2,530	5,027	180	637,540	3,653
	NEW HAMPSHIRE.											
311	Berlin	3,686	11,466	5-16	2,510	1,160	740	625	1,365	185	166,202	895
	Concord:											
312	Union district	1[c],632	20,047	.....	3,162	590	1,283	1,456	2,739	175	413,000	2,300
313	Penacook district, No. 20			5-15	330	0	170	169	339	171	46,170	270
314	Dover	13,207	13,417	5-16	2,360	[a] 955	800	815	1,621	171	223,497	1,307
315	Keene (union district)	9,165	10,025	5-16	1,779	288	794	857	1,651	172	227,926	1,325
316	Laconia	8,042	8,042	5-16	1,420	175	660	707	1,376	175	227,384	1,321
317	Manchester	56,987	63,417	5-16	[b] 10,000	.....	2,923	2,918	5,841	175½	774,306	4,412
318	Nashua	23,898	26,193	6-14	5,200	1,800	1,765	1,905	3,670	170	388,110	2,283
319	Portsmouth	10,637	11,042	5-16	1,938	384	900	959	1,819	178	267,392	1,502
320	Rochester	8,466	9,001	5-16	1,141	200	600	620	1,220	170	173,230	1,019

	NEW JERSEY.											
321	Atlantic City	27,838	37,593	5-20	5,650	150	2,770	2,740	5,510	174	671 079	3,860
322	Bayonne	32,722	42,262	4-20	11,500	.....	3,299	3,339	6,638	191	924,800	4,849
323	Bloomfield	9,668	11,668	4-20	2,750	350	1,098	1,149	2,247	196	306,200	1,560
324	Bridgeton	13,913	13,624	5-20	3,240	75	1,259	1,310	2,569	186	337,746	1,796
325	Camden	75,935	83,363	5-20	.....	1,732	6,221	6,672	12,893	189	1,755,432	9,288
326	East Orange	21,506	25,175	.....	.....	.....	2,320	2,300	4,620	189	662,117	3,503
327	Elizabeth [c]	52,130	60,509	.....	.....	.....	3,412	3,721	7,133	190	1,043,653	5,626
328	Harrison [c]	10,596	12,823	.....	.....	.....	551	492	1,053	190	126,469	666
329	Hoboken	59,364	65,468	5-20	.....	2,600	5,202	5,031	10,233	195[4]	1,515,118	7,810
330	Jersey City	206,433	232,699	4-20	.....	.....	16,465	16,634	33,099	194	4,915,555	25,775
331	Kearney	10,806	13,601	.....	.....	.....	1,178	1,227	2,405	190	344,279	1,856
332	Long Branch	8,872	12,183	.....	.....	100	1,329	1,287	2,616	183	351,344	1,933
333	Millville	10,553	11,684	.....	.....	175	1,130	1,160	2,290	198	327,492	1,654
334	Montclair	13,962	16,370	4-20	.....	360	1,658	1,529	3,187	[d]182	457,295	2,406
335	Morristown	11,267	12,146	.....	.....	.....	775	780	1,555	191	225,712	1,191
336	Newark	246,070	283,289	.....	.....	.....	23,300	23,454	46,900	191½	6,654,192	34,747
337	New Brunswick	20,006	23,133	7-18	5,073	1,283	1,401	1,343	2,744	188½	417,904	2,217
338	Orange	24,141	26,101	4-20	6,000	1,200	2,020	2,038	4,058	190	517,370	2,723
339	Passaic	27,777	37,837	5-20	[b]7,200	1,500	3,118	2,907	6,025	189	839,916	4,444
340	Paterson	105,171	111,529	4-21	18,248	6,000	9,183	9,065	18,248	201	2,795,508	13,908
341	Perth Amboy	17,009	25,895	5-20	5,920	860	2,136	2,029	4,165	192	582,536	2,983
342	Phillipsburg	10,052	13,352	5-20	.....	200	,055	1,070	2,125	189	329,861	[e]1,741
343	Plainfield	15,369	18,406	.....	.....	000	,317	1,471	2,988	183	386,708	2,113
344	Rahway	7,935	.....	4-20	[b]2,000	100	764	723	1,487	189	218,450	1,160
345	Town of Union	15,187	17,005	5-18	5,800	650	1,759	1,756	3,517	199	509,003	2,558
346	Trenton	73,307	84,130	5-21	25,323	3,600	5,628	5,880	11,508	194	1,800,126	9,279
347	West Hoboken	23,094	29,062	5-18	[b]8,000	1,000	2,604	2,586	5,252	199	734,907	3,693
	NEW YORK.											
348	Albany	94,151	97,801	4-18	[a]19,406	4,215	6,599	6,576	13,175	179	1,906,629	10,651
349	Amsterdam	20,929	23,807	5-18	5,250	1,200	1,536	1,587	3,123	192	485,912	[b]2,531
350	Auburn	30,345	32,528	5-18	6,282	1,190	1,915	1,995	3,910	187	596,136	3,163
351	Batavia	9,130	9,936	5-18	2,444	[a]319	991	1,069	2,060	187	249,928	1,329
352	Binghamton	39,647	43,100	5-18	8,312	513	3,397	3,448	6,845	195	1,123,395	5,761
353	Buffalo	352,387	376,945	5-18	96,000	22,176	31,048	30,296	61,344	193	8,781,693	45,501
354	Cohoes	23,910	24,183	5-18	5,878	2,000	1,218	1,250	2,468	191	336,978	1,809
	Corning:											
355	District No. 9	11,061	13,438	5-18	1,800	650	547	550	1,097	189	160,722	846
356	District No. 13											
357	Cortland	9,014	11,194	5-18	2,076	446	764	774	1,538	187	236,766	1,266
358	Dunkirk	11,616	15,198	5-18	3,270	1,193	950	899	1,849	190	274,058	1,442
359	Elmira	35,672	35,729	4-18	3,337	1,000	2,514	2,633	5,147	193	818,036	4,260
360	Geneva	10,433	12,162	5-18	2,647	556	788	839	1,627	190	218,980	1,152
361	Glens Falls [a]	12,613	14,650	5-18	1,750	.....	.....	.....	1,744	185	238,592	1,290
362	Gloversville	18,349	18,578	5-18	3,436	78	1,550	1,525	3,075	193	483,582	2,506
363	Hornellsville	11,918	13,145	8-14	2,400	479	1,096	1,244	2,342	188	324,097	1,729
364	Hudson	9,526	10,364	5-18	1,728	[a]374	634	664	1,298	188	187,349	1,060
365	Ithaca	13,136	14,406	5-16	2,331	412	1,159	1,143	2,302	192	353,093	1,849
366	Jamestown	22,892	26,005	[a]4-18	[a]5,266	319	2,422	2,473	4,895	188	749,790	3,987

[a] Statistics of 1903-4. [b] From State school report, 1905. [c] Approximately. [d] From State school report, 1904. [e] High school, 183 days.

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated).	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	NEW YORK—continued.											
367	Johnstown	10,120	9,765	4–18	2,040	0	862	941	1,803	193	297,796	1,544
368	Kingston	24,535	25,411	5–18	5,788	985	2,150	2,203	4,353	189	633,188	3,306
369	Lansingburg	12,895		5–18	2,634	500	1,004	992	1,996	185	286,578	1,504
370	Little Falls	10,381	11,038	4–18	2,000	600	617	674	1,291	193	199,481	1,034
371	Lockport	16,581	17,428	5–18	3,750	445	1,593	1,563	3,156	187	483,769	2,587
372	Middletown	14,522	15,682	5–18	a 2,800	250	1,140	1,111	2,251	188	342,530	1,822
373	Mount Vernon	20,346	24,930	4–18	5,465	185	2,518	2,556	5,074	193	724,467	3,754
374	Newburgh	24,943	26,320	5–18	5,845	1,065	2,090	2,162	4,252	189	618,362	3,282
375	New Rochelle	14,720	20,387	5–18	4,900	435	2,097	2,061	4,158	185	544,256	2,937
376	New York	3,437,202	4,000,928	5–18	982,173	136,611	328,533	326,970	655,503	193	991,965	487,005
377	Niagara Falls	19,457	26,431	5–18	5,345	779	2,415	2,223	4,638	194	614,980	3,170
378	North Tonawanda	9,009	10,135	4–18	2,962	344	1,068	1,091	2,159	189	309,116	1,653
379	Ogdensburg	12,633	14,815	5–18	2,754	500	1,154	1,718	2,872	188	330,938	b 1,758
380	Olean school district	9,462	9,776	5–18	2,630	343	1,270	1,314	2,584	187	397,356	2,125
381	Oswego	22,199	22,382	5–18	5,495	b 1,100	1,769	1,763	3,532	192	547,584	2,853
	Peekskill											
382	District No. 7 (Drum Hill)	10,356	13,200	5–18	1,288	134	566	631	1,197	186	163,337	880
383	District No. 8 (Oakside)			5–18	1,040	40	490	507	997	189	139,986	741
384	Plattsburg	8,434	9,824	5–18	2,413	322	901	860	1,761	188	250,561	1,333
385	Port Jervis	9,385	9,695	5–18		105	992	1,071	2,023	193	297,602	1,542
386	Poughkeepsie	24,029	25,146	5–18	4,300	929	1,835	1,894	3,529	188	504,881	2,712
387	Rochester	162,608	182,028	5–18	40,534	12,052	11,992	11,633	23,625	193	4,015,365	20,806
388	Rome	15,343	17,334	5–18	a 2,760	584	1,137	1,101	2,238	192	338,862	1,776
389	Saratoga Springs	12,409	12,999	5–18	2,636	150	1,205	1,256	2,461	190	382,754	2,038
390	Schenectady	31,682	56,195	5–18		1,578	3,714	3,813	7,527	185	1,043,856	5,642
391	Syracuse	108,374	117,124	5–21	25,500	1,873	9,772	10,146	19,918	191	3,103,941	16,251
392	Troy	60 051	76,222	5–18	a 11,000	3,800	3,361	3,331	6,692	183	987,727	5,497
393	Utica	50,383	63,648	5–18	13,425	2,822	5,208	4,995	10,203	191	1,443,578	7,556
394	Watertown	21,696	25,276	4½–18	4,800	10	2,186	2,229	4,415	188	680,613	3,617
395	Watervliet	14,221	14,481	5–18	3,062	1,150	811	849	1,660	187	231,934	1,240
396	White Plains	7,899		5–18	1,975	189	784	824	1,608	190	250,696	1,319
397	Yonkers	47,931	61,405	4–16	13,600	2,968	5,053	4,948	10,001	185	1,456,795	7,883

	NORTH CAROLINA.											
398	Asheville	14,694	17,924	6-21	4,602	500	1,253	[illegible]1,308	2,621	190	319,534	1,662
399	Charlotte	18,091	21,356	6-21	5,439	300	1,448	1,647	3,096	180	375,480	2,096
400	Concord	7,910		6-21	2,850	125	725	700	1,425	167	154,328	984
401	Durham	6,679		6-21	3,029	*50	1,229	1,309	2,538	185	a351,500	1,900
402	Greensboro	10,035	13,305	6-21	4,067	*500	1,032	1,235	2,267	176	290,576	1,651
403	Newbern	9,090	9,715	6-21	2,207	250	506	673	1,179	a160	124,000	775
404	Raleigh[b]	13,643	14,128		6,324		1,213	1 375	2,588	175	a321,650	1,838
405	Wilmington	20,976	21,436	6-21		250	1,496	1,520	3,006	160	a374,400	2,340
406	Winston*	10,008	11,003	6-21	3,400	200	806	929	1,736	175	193,673	1,107
	NORTH DAKOTA.											
407	Fargo	9,589	12,512	6-20	2,980	46	942	947	1,889	180		
408	Grand Forks	7,602		6-21	2,906		934	1,030	1,964	190	306,770	1,625
	OHIO.											
409	Akron	42,728	49,403	6-21	12,770	1,500	4,173	4,096	8,269	183	1,427,583	7,801
410	Alliance	8,974	9,659	6-21	3,013	150	993	958	1,951	188	302,690	1,610
411	Ashtabula*	13,949	15,004		2,389	175	1,044	1,014	2,058	180	275,400	1,530
412	Bellaire	9,912	9,912	6-21	3,607	300	909	902	1,811	173	229,571	1,327
413	Cambridge	8,241	10,181	6-21		0	1,025	1,028	2,053	177	294,457	1,679
414	Canton	30,667	37,907	6-21	11,434	1,000	3,073	3,191	6,264	182	1,001,450	5,502
415	Chillicothe[c]	12,979	13,321	6-21	4,258				2,808	190	a295,010	2,079
416	Cincinnati	325,902	343,337	6-21	124,680	26,979	22,919	21,308	44,227	200	6,867,000	34,335
417	Cleveland	381,768	437,114	6-21	114,522		35,394	34,217	69,611	184	9,586,768	52,102
418	Columbus	125,560	142,106	6-21	37,242	d3,445	10,304	10,027	20,931	d184	a3,174,552	17,253
419	Dayton	85,333	96,350	6-21	26,295	c3,519	6,882	7,088	13,970	175	1,972,428	11,271
420	East Liverpool	10,485	19,557	6-21	5,037	400	1,961	2,020	3,971	173	499,500	2 880
421	Elyria	8,791	10,381	6-21	2,454	320	927	989	1,886	175	280,875	1,615
422	Findlay[c]	17,613	17,613		5,049	29			3,639	180	a504,360	2,802
423	Fremont	8,430	9,088	6-21	2,584	350	742	763	1,505	175	203,255	1,161
424	Hamilton	23,914	27,044	6-21	7,737	1,200	1,991	1,993	3,984	182	608,426	3,343
425	Ironton*	11,808	12,133	6-21	4,170	192	1,079	1,206	2,375	176	350,120	1,995
426	Lancaster	8,991	9,711	6-21	3,238	275	974	984	1,958	180	287,370	1,596
427	Lima	21,723	27,048	6-21	7,400	783	2,107	2,202	4,309	190	636,120	3,348
428	Lorain	16,028	21,613	6-21	4,500	*5	1,027	1,033	2,060	183	446,896	2,442
429	Mansfield	17,640	19,725	6-21	4,625	280	1,605	1,656	3,261	170	461,550	2,715
430	Marietta[c]	13,348	15,888	6-21	4,402	203			2,869	190	a552,580	2,382
431	Marion	11,862	13,647	6-21	4,017	356	1,329	1,338	2,667	173	376,408	2,169
432	Massillon	11,944	12,869	6-21	4,359	800	1,094	1,145	2,239	188	360,468	1,898
433	Middletown*	9,215	9,290	6-21	2,069		820	1,073	1,893	200	267,000	1,335
434	Newark	18,157	20,102	6-21	6,500	502	1,925	2,019	3,944	185	539 905	3,027
435	Piqua	12,172	13,332	6-21	4,342	500	943	930	1,873	180	303 120	1,684
436	Portsmouth	17,870	20,240	6-21	6,130	450	1,841	1,725	3,566	185	520,220	2,812
437	Sandusky	19,664	20,280	6-21	6,230	1,200	1,498	1,535	3,033	190	501,410	2,639
438	Springfield	38,253	41,433	6-21	11,049	1,400	3,225	3,360	6,585	183	998,119	5,454
439	Steubenville	14,349	14,829	6-21	4,908	800	1,258	1,270	2,528	181½	370,804	2,043
440	Tiffin	10,989	11,039	6-21	3,372	700	690	724	1,414	186	222,270	1,195

*Statistics of 1903–4.
a Approximately.
b From biennial State school report for 1903 and 1904
c From State school report, 1904.
d From Superintendent's annual report, 1905.

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate)	School age.	Children of school age	Pupils in private and parochial schools (largely estimated)	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	OHIO—continued.											
441	Toledo	131,822	155,287	6-21	40,185	.....	11,562	11,489	23,051	195	3,712,410	19,038
442	Warren	6,529	9,814	6-21	3,429	*0	1,118	1,114	2,232	180	372,400	1,980
443	Wellston	8,045	9,890	6-21	2,905	0	1,156	1,144	2,300	176	c 303,072	1,722
444	Xenia	8,696	9,246	6-21	2,384	175	855	872	1,727	182	248,401	1,364
445	Youngstown	44,885	51,516	6-21	14,073	3,000	4,068	3,949	8,017	185	1,177,710	6,366
446	Zanesville*	23,538	24,603	6-21	6,034	650	1,921	1,963	3,884	185	600,605	3,247
	OKLAHOMA.											
447	Guthrie	10,006	12,341	.....	.....	.....	.....	.....	.....	.....	.....	.....
448	Oklahoma City	10,037	19,550	6-21	6,575	500	2,100	2,358	4,458	180	537,120	2,984
	OREGON.											
449	Astoria	8,381	9,481	4-21	3,166	100	761	780	1,541	185	231,423	1,251
450	Portland	90,426	104,141	6-20	20,904	2,000	7,275	7,634	14,909	191	2,215,142	11,598
	PENNSYLVANIA.											
451	Allegheny	129,896	142,848	b 8-16	b 38,582	b 3,955	9,894	9,844	19,738	200	2,810,400	14,052
452	Allentown	35,416	40,571	6-16	*5,939	400	3,004	2,997	6,001	195	1,086,198	5,556
453	Altoona	38,973	45,557	6-16	7,352	1,800	3,567	3,781	7,348	180	1,006,999	5,595
454	Beaver Falls	10,054	10,214	6-16	1,635	325	875	886	1,761	180	260,305	1,446
455	Braddock	15,654	18,624	6-16	3,400	1,000	1,241	1,179	2,420	180	314,820	1,749
456	Bradford	15,029	16,319	6-21	4,373	200	1,487	1,541	3,028	180	417,000	2,350
457	Butler	10,853	11,913	6-21	4,000	500	1,267	1,336	2,603	180	382,180	2,123
458	Carbondale	13,536	14,736	6-21	3,546	300	1,369	1,499	2,868	189	415,800	2,200
459	Carlisle	9,626	10,631	6-21	.....	200	768	788	1,556	190	245,912	1,294
460	Chambersburg	8,864	9,557	6-21	2,300	150	889	991	1,880	180	266,580	1,481
461	Chester	33,988	37,333	6-21	.....	950	2,754	2,910	5,664	190	812,250	4,275
462	Columbia	12,316	13,251	6-21	3,000	400	979	1,074	2,053	180	310,680	1,726
463	Danville	8,042	8,062	*6-16	*1,448	296	631	663	1,294	180	200,160	1,112
464	Dubois	9,375	10,990	*6-21	*2,500	450	850	950	1,800	180	292,500	1,625
465	Dunmore c	12,583	14,718	.....	.....	.....	1,378	1,425	2,803	180	c 390,960	2,172

466	Duquesne	9,036	11,201	6-18	.. ....	150	1,195	1,097	2,292	180	308,520	1,714	
467	Easton	25,238	27,808	6-16	4,219	250	2,215	2,256	4,471	196	728,929	3,719	
468	Erie	52,733	58,783	6-21	17,400	3,686	3,834	3,887	7,721	190	1,158,264	6,096	
469	Harrisburg	50,167	54,807	6-16	8,570	500	4,703	4,826	9,529	190	1,430,805	7,045	
470	Hazleton	14,230	15,533	6-21	a 5,000	550	1,523	1,565	3,088	180	447,480	2,486	
471	Homestead	12,554	15,015	6-21	.....	813	1,287	1,188	2,470	180	262,140	1,623	
472	Johnstown	35,235	42,160	*6-21	*9,600	2,380	2,840	3,047	5,896	180	1,007,280	5,596	
473	Lancaster	41,459	46,184	6-21	a 11,000	1,500	2,864	2,953	5,837	199	939,081	4,719	
474	Lebanon	17,628	19,108	6-21	3,600	350	1,361	1,482	2,843	180	418,860	2,327	
475	McKeesport	34,227	42,024	6-16	6,000	500	.....	.....	6,067	180	972,900	5,405	
476	Mahanoy City	13,504	14,614	6-16	3,000	300	1,219	1,314	2,533	180	383,040	2,128	
477	Meadville	10,291	11,684	6-21	*2,800	250	986	969	1,955	180	282,060	1,567	
478	Mount Carmel	13,179	15,644	6-20	.....	600	1,005	1,071	2,076	180	284,990	1,574	
479	Nanticoke c	12,116	13,151	.....	.....	.....	1,205	1,278	2,483	180	a 344,520	1,914	
480	Newcastle	28,230	35,429	.....	.....	*500	2,630	2,964	5,590	180	790,740	4,393	
481	Norristown	22,265	23,500	6-21	4,800	500	1,647	1,675	3,322	200	482,800	2,414	
482	Oil City c	12,264	14,429	.....	.....	.....	1,243	1,346	2,589	180	a 375,840	2,088	
483	Philadelphia	1,293,697	1,417,082	6-16	217,985	.....	98,549	100,999	199,518	179	26,614,784	141,588	
484	Phoenixville	9,196	9,536	6-21	1,800	500	651	635	1,286	190	187,910	989	
485	Pittsburg	321,616	364,161	6-21	70,000	12,000	26,187	26,543	52,730	200	7,954,000	39,770	
486	Pittston c	12,556	13,681	.....	.....	.....	1,024	1,099	2,123	180	a 288,900	1,605	
487	Plymouth	13,649	15,804	6-21	5,000	1,000	1,154	1,249	2,403	180	329,760	1,832	
488	Pottstown	13,698	13,901	6-21	3,400	35	1,459	1,443	2,902	200	439,400	2,197	
489	Pottsville c	15,710	16,805	.....	.....	.....	1,287	1,326	2,613	200	a 470,200	2,351	
490	Reading	78,961	89,111	6-16	14,391	1,406	6,576	6,497	13,073	194	2,014,302	10,383	
491	Scranton	102,026	116,111	6-21	28,577	4,500	9,041	9,567	18,608	194	2,723,817	14,000	
492	Shamokin	18,202	20,102	6-16	4,434	1,300	1,620	1,733	3,353	180	464,040	2,578	
493	Sharon	8,916	11,724	6-16	2,500	600	1,000	1,087	2,087	180	290,290	1,646	
494	Shenandoah	20,321	22,511	6-21	6,000	500	1,836	1,902	3,738	180	560,880	3,116	
495	South Bethlehem	13,241	14,711	6-21	.....	940	1,121	965	2,086	200	a 378,000	c 1,890	
496	Steelton	12,086	13,824	6-21	2,800	300	1,002	965	1,967	180	298,191	1,657	
497	Sunbury	9,810	10,775	6-21	2,600	*0	1,050	1,100	2,150	180	312,660	1,737	
498	Titusville	8,244	8,329	6-21	2,140	490	711	807	1,518	187	224,993	1,203	
499	Warren	8,043	10,280	.....	.....	100	915	972	1,887	180	283,140	1,573	
500	Washington	7,670	.....	6-16	*2,800	445	1,285	1,488	2,773	180	395,460	2,197	
501	Westchester	9,524	10,274	6-21	1,824	350	799	843	1,642	195	234,390	1,302	
502	Wilkesbarre	51,721	58,721	6-21	10,000	1,100	4,646	4,679	9,325	187	1,379,125	7,375	
503	Wilkinsburg	11,886	16,150	6-16	*2,600	250	1,216	1,390	2,606	180	389,177	2,200	
504	Williamsport	28,757	29,572	6-16	6,000	798	2,612	2,714	5,326	179	780,440	4,360	
505	York	33,708	38,238	*6-21	*8,500	750	3,106	3,003	6,109	180	867,727	4,820	
	RHODE ISLAND												
506	Central Falls	18,167	19,446	5-15	3,773	1,057	1,306	1,257	2,462	192	324,864	1,692	
507	Cranston	13,343	17,570	5-15	2,796	30	.....	.....	2,420	187	395,318	2,114	
508	Cumberland	8,925	9,378	5-15	2,110	500	666	666	1,332	184	184,797	1,005	
509	East Providence	12,139	13,750	5-16	3,141	72	1,418	1,443	2,861	180	372,060	2,067	
510	Lincoln	8,937	9,222	5-16	2,039	661	543	493	1,026	200	182,340	914	
511	Newport	22,034	25,039	7-15	4,173	1,003	1,887	1,922	3,809	195	607,035	3,113	
512	Pawtucket	39,231	43,381	7-15	9,348	2,409	3,635	3,439	7,074	a 181	980,750	4,761	

* Statistics of 1903–4. a Approximately. b From the annual report of the superintendent, 1905. c From State school report, 1905.

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated).	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	RHODE ISLAND—continued.											
513	Providence	175,597	198,635	5–15	37,613	5,561	14,860	14,932	29,793	187½	4,219,875	22,505
514	Warwick	21,316	24,772	5–15	5,449	1,113	1,514	1,553	3,067	192	498,096	2,438
515	Woonsocket	28,204	32,196	5–16	7,461	2,615	1,844	1,793	3,637	200	522,600	2,613
	SOUTH CAROLINA.											
516	Charleston	55,807	56,232	6–21	9,947	.....	4,183	4,312	8,695	155	1,008,250	5,460
517	Columbia	21,108	23,988	6–21	a5,500	500	1,282	1,648	2,930	174	361,224	2,076
518	Greenville[b]	11,860	13,485	.....	.....	.....	1,030	1,268	2,296	180	280,440	1,606
519	Spartanburg	11,395	14,320	6–20	a3,000	450	1,173	1,311	2,484	177	311,520	1,708
	SOUTH DAKOTA.											
520	Sioux Falls	10,266	12,263	6–20	a3,675	200	1,331	1,285	2,616	180	354,600	1,970
	TENNESSEE.											
521	Chattanooga	30,154	34,179	6–21	10,208	.....	2,181	2,574	4,755	177	503,128	3,238
522	Clarksville	9,431	10,186	6–20	3,443	500	796	1,001	1,797	191	226,047	1,171
523	Jackson	14,511	16,746	6–21	7,252	400	1,198	1,445	2,643	180	385,740	2,143
524	Knoxville	32,637	35,462	6–21	10,406	500	2,053	3,023	5,076	180	811,191	4,507
525	Memphis	102,320	121,235	6–21	36,911	3,000	5,422	6,190	11,612	176	1,433,641	8,120
526	Nashville	80,865	84,227	6–21	a30,060	c1,000	6,062	6,774	12,836	180	1,867,825	10,007
	TEXAS.											
527	Austin	22,258	24,718	8–17	4,566	620	1,900	2,006	3,906	180	513,400	2,880
528	Beaumont	9,427	.....	7–17	2,968	300	1,420	1,481	2,901	177	326,508	1,845
529	Cleburne	7,403	.....	7–18	d 1,899	100	1,134	1,251	2,385	180	319,078	1,883
530	Corsicana	9,313	11,924	7 17	1,853	50	919	989	1,908	174	197,825	1,136
531	Dallas	42,638	82,248	8–17	10,305	c1,000	4,640	5,128	9,829	180	1,372,500	7,625
532	Denison	11,807	12,223	8–16	3,200	300	1,129	1,298	2,427	183	398,790	2,130
533	El Paso	15,906	18,891	8–17	3,714	800	1,985	2,091	4,076	171	440,976	2,580
534	Fort Worth	26,688	27,026	8–17	5,877	500	2,713	3,074	5,787	173	755,551	4,310
535	Gainesville	7,874	.....	8–17	1,567	140	708	869	1,578	180	221,762	1,198

536	Galveston	37,789	33,484	7-17	*5,183	*2,000	2,250	2,821	4,771	174	549,738	3,159
537	Houston	44,633	56,300	8-17	11,661	1,000	4,256	4,863	9,119	176	1,138,476	6,423
538	Laredo	13,429	14,484	7-17	2,892	*1,500	516	618	134	177	162,486	918
539	Marshall	7,855	.....	7-17	2,978	400	794	815	1,609	160	142,005	888
540	Palestine	8,297	9,527	7-17	2,540	150	850	928	1,778	175	230,836	1,318
541	Paris	9,358	9,908	8-17	2,810	200	1,140	1,417	2,557	160	360,000	2,250
542	San Antonio	53,321	61,146	8-17	11,841	*3,014	4,548	4,805	9,353	178	1,179,196	6,624
543	Sherman	10,243	11,698	8-17	2,235	500	1,080	1,200	2,280	172	272,323	1,600
544	Tyler d	8,069	8,649	8-17	1,781	150	891	959	1,820	178	218,447	1,227
545	Waco	20,686	23,806	7-21	5,700	875	2,112	2,252	4,364	175	521,420	2,978
	UTAH.											
546	Ogden	16,313	17,023	6-18	5,328	300	2,224	2,284	4,508	175	652,470	3,728
547	Salt Lake City	53,531	59,914	6-18	16,849	744	7,157	7,247	14,404	175	1,993,845	11,393
	VERMONT.											
548	Barre	8,446	10,696	5-18	2,391	.....	.....	.....	2,361	173	321,401	1,857
549	Burlington	13,640	20,665	5-18	4,328	1,200	1,260	1,267	2,526	177	361,453	2,117
550	Rutland	11,499	11,884	5-18	2,800	901	954	1,045	1,999	188	320,381	1,704
	VIRGINIA.											
551	Alexandria	14,528	14,623	5-20	4,631	400	846	1,013	1,861	197	291,860	1,480
552	Danville	16,520	17,720	5-21	5,060	*730	1,217	1,428	2,645	180	330,822	1,857
553	Lynchburg	18,891	22,380	5-21	6,735	363	1,603	1,941	3,544	185	522,440	2,824
554	Manchester	9,715	9,950	.....	.....	.....	.....	.....	.....	.....	.....	.....
555	Newport News	19,635	27,220	5-21	4,194	226	1,184	1,384	2,508	182	338,520	1,900
556	Norfolk	46,624	85,008	5-21	12,214	1,371	2,611	2,847	5,466	180	847,006	4,492
557	Petersburg	21,810	21,810	7-20	6,293	500	1,359	1,700	3,059	180	426,220	2,379
558	Portsmouth	17,427	18,427	5-20	4,664	402	1,072	1,274	2,346	189	262,124	1,916
559	Richmond	85,050	86,860	7-20	20,086	3,000	5,532	6,853	12,185	180	1,791,000	9,950
560	Roanoke	21,495	24,165	5-21	6,572	1,000	2,075	2,459	4,534	174	560,955	3,267
	WASHINGTON											
561	Ballard	4,508	.....	*5-21	*2,680	30	1,212	1,267	2,479	183½	356,429	1,942
562	Bellingham	11,062	c 11,026	5-21	4,256	0	2,064	2,142	4,206	183	594,201	3,247
563	Everett	7,838	.....	6-21	4,145	280	1,500	1,624	3,124	192	461,508	2,404
564	Seattle	80,671	c 96,803	6-21	23,948	1,403	8,987	9,128	18,115	193	2,675,146	13,864
565	Spokane	36,848	45,313	5-21	11,585	769	5,440	5,457	10,897	179	1,421,893	7,944
566	Tacoma	37,714	c 48,532	5-21	13,389	*367	4,922	4,676	9,598	193	1,493,704	7,687
567	Walla Walla	10,049	12,719	5-21	*3,097	360	1,145	1,149	2,294	196	316,675	1,629
	WEST VIRGINIA.											
568	Charleston	11,099	13,279	6-21	4,356	100	1,537	1,572	3,109	178	365,700	2,204
569	Huntington	11,923	12,833	6-21	4,300	400	*1,260	*1,271	*2,531	*185	*302,150	*1,949
570	Parkersburg	11,703	16,049	6-21	4,884	300	1,914	2,004	3,918	180	562,140	3,123
571	Wheeling	38,878	41,058	6-21	12,009	1,720	2,564	2,782	5,316	190	774,250	4,075

* Statistics of 1903–4.
a Approximately.
b From State school report, 1905.
c From the annual report of the superintendent, 1904.
d From biennial State school report for 1903 and 1904.
e Estimate of 1904.

TABLE 6.—*Statistics of population, school enrollment, and attendance in cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Total population, census of 1900.	Population, 1904 (Census Office estimate).	School age.	Children of school age.	Pupils in private and parochial schools (largely estimated).	Different pupils enrolled in public day schools			Number of days the schools were actually in session	Aggregate number of days' attendance of all pupils in public day schools.	Average daily attendance in public day schools.
							Boys.	Girls.	Total.			
	1	2	3	4	5	6	7	8	9	10	11	12
	WISCONSIN.											
572	Appleton	15,085	17,000	4–20	5,131	1,577	1,381	1,400	2,781	175	377,650	2,156
573	Ashland	13,074	14,519	4–20	4,704	1,000	1,483	1,396	2,879	190	409,682	2,156
574	Beloit	10,436	12,855	4–20	4,670	39	1,458	1,544	3,002	184	406,315	2,214
575	Chippewa Falls	8,094	9,009	4–26	3,481	*770	729	738	1,467	180	223,044	1,239
576	Eau Claire	17,517	18,737	4–20	6,944	300	2,170	2,167	4,337	180	610,306	3,391
577	Fond du Lac	15,110	17,284	4–20	5,299	680	1,672	1,688	3,360	180	439,340	2,441
578	Greenbay	18,684	22,854	4–20	7,273	1,038	1,966	1,937	3,903	200	620,949	3,105
579	Janesville	13,185	13,770	4–20	4,041	200	1,287	1,299	2,586	190	401,080	2,111
580	Kenosha	11,606	16,235	4–20	6,000	*841			2,140	188	360,960	1,920
581	Lacrosse	28,895	29,078	4–20	10,102	1,282	2,539	2 550	5,095	192	775,849	4,003
582	Madison	19,164	24,301	4–20	8,704	1,024	1,779	1,773	3,552	185	532,396	2,916
583	Manitowoc	11,786	12,733	4–20	4,308	677	1,224	1,225	2,449	200	361,514	1,842
584	Marinette	16,195	15,354	4–20	5,951	568	1 574	1,610	3,184	176	490 824	2,845
585	Merrill	8 537	9,197	4–20	3,450	800	874	895	1,769	176	243,888	1,320
586	Milwaukee	285,315	312,948	4–20	105,953	19,682	23,271	21,942	45,213	196	6,810,608	34,748
587	Oshkosh	28,284	30,575	4–20	9,635	1,600	2,427	2,460	4,887	199	749,451	3,766
588	Racine	29,102	32,290	4–20	10,685	1,204			5,081	200	963,000	4,915
589	Sheboygan	22,962	24,026	4–20	8,918	*0	2,040	1,975	4,015	194	604,823	3,134
590	Stevens Point	9,524	9,022	4–20	4,056	624	1,163	1,403	2,566	180	355,650	1,976
591	Superior	31,091	36,551	4–20	8,989	942	3,246	3,191	6,437	190	941 926	4,958
592	Watertown	8,437	8,622	4–20	3,437	800	556	589	1,145	191	182,756	950
593	Wausau	12,354	14,458	4–20	5,523	508	1,787	1,827	3,614	180	459,333	2,532
	WYOMING.											
594	Cheyenne	14,087	13,656	7–21	1,742	.....	706	706	1,412	169½	184,189	1,084

*Statistics of 1903–4.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5.*

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women.	Total.	Men.	Women.	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	ALABAMA.													
1	Anniston*	1	0	1	4	17	21	All	None	0	0	5	908	$15,000
2	Birmingham	4	2	6	19	116	126	1 to 7	1 to 7	0	0	11	5,457	325,000
3	Huntsville	1	0	1	4	16	20	1 to 5	None*	0	0	2	800	40,000
4	Mobile	1	2	3	18	72	90	1 to 7	1 to 7	4	0	13	.....	133,000
5	Montgomery	2	2	4	6	99	105	All	None	0	0	17	*3,500	275,000
6	Selma	3	2	5	3	23	26	1 to 9	All	0	0	3	1,000	60,000
	ARIZONA.													
7	Tucson	1	1	2	0	28	28	3 to 8	None	0	0	5	1,400	113,696
	ARKANSAS.													
8	Fort Smith	1	0	1	13	58	71	Elementary and 2 years in high school.	First 2 years in high school.	0	0	10	3,286	305,465
9	Hot Springs	2	2	4	5	40	45	All	None	0	0	6	2,500	60,000
10	Little Rock*	1	1	2	8	86	94	All	None	0	1	13	4,785	371,751
11	Pine Bluff	1	0	1	15	28	43	1 to 8	None*	0	0	8	2,875	200,000
	CALIFORNIA.													
12	Alameda	8	5	13	5	79	84	All	Elementary	0	1	7	2,942	274,054
13	Berkeley	2	2	4	13	93	106	All	None	0	0	15	4,426	400,000
14	Eureka	1	0	1	5	34	39	Elementary	None	0	0	13	1,892	132,600
15	Fresno	4	1	5	16	77	93	All	8 to 10	1	0	10	3,216	258,300
16	Los Angeles	3	0	3	56	728	784	B 1 to A 12	Elementary	47	1	61	31,198	2,3[illegible],600
17	Oakland	14	2	16	18	255	273	All	All	2	3	20	14,500	2,326,350
18	Pasadena	1	3	4	11	93	104	All	1 to 4	6	0	15	4,194	437,200
19	Riverside	2	2	4	4	40	44	4 to 8	None	1	0	7	2,095	285,500
20	Sacramento	4	4	8	4	145	149	All	None	9	1	16	4,675	428,475
21	San Diego	5	1	6	6	84	90	1 to 10	4 to 8	6	0	16	3,190	196,771

*Statistics of 1903–4.

TABLE 7.—Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1903-04—Continued.

City.	Supervising officers.			Regular teachers.			Grades in which drawing is given	Grades in which training other than drawing is given.	[illegible]	[illegible]	[illegible]	[illegible]
	Men.	Women.	Total.	Men.	Women.	Total.						
1	2	3	4	5	6	7	8	9	10	11	12	13
CALIFORNIA—continued.												
San Francisco	14	10	24	97	865	962	2 to 8	7 to 8	[illegible]	[illegible]	[illegible]	[illegible]
San Jose	10	3	13	2	105	107	All		[illegible]	[illegible]	[illegible]	[illegible]
Stockton	5	2	7	7	62	69	Elementary and first 2 high school.	7 to 8	[illegible]	[illegible]	[illegible]	[illegible]
Vallejo	0	0	0	3	31	34	3 to 8	None	[illegible]	[illegible]	[illegible]	[illegible]
COLORADO.												
Colorado Springs	4	7	11	11	110	121	All	Elementary	[illegible]	[illegible]	[illegible]	[illegible]
Cripple Creek	4	4	8	11	89	100	1 to 8	None	[illegible]	[illegible]	[illegible]	[illegible]
Denver	29	6	35	82	706	788	All	4 to 8	[illegible]	[illegible]	[illegible]	[illegible]
Leadville	3	2	5	6	35	41	1 to 12	None	[illegible]	[illegible]	[illegible]	[illegible]
Pueblo:												
District No. 1	4	8	12	2	92	94	1 to 9	5 to 10	[illegible]	[illegible]	[illegible]	[illegible]
District No. 20	2	6	8	5	99	104	All	5 and above	[illegible]	[illegible]	[illegible]	[illegible]
CONNECTICUT.												
Ansonia	2	1	3	0	68	68	All	None	[illegible]	[illegible]	[illegible]	[illegible]
Bridgeport	8	6	14	6	248	254	All	City Normal	[illegible]	[illegible]	[illegible]	[illegible]
Bristol	1	3	4	4	51	55	All	4 and above	[illegible]	[illegible]	[illegible]	[illegible]
Danbury	5	2	7	4	67	71	All	None	[illegible]	[illegible]	[illegible]	[illegible]
Hartford	13	9	22	42	344	386	All	High school	[illegible]	[illegible]	[illegible]	[illegible]
Manchester:												
Town schools	1	2	3	1	23	24	1 to 9	None	[illegible]	[illegible]	[illegible]	[illegible]
Ninth district	1	10	b 11	2	18	20	All	All	[illegible]	[illegible]	[illegible]	[illegible]
Meriden	6	1	7	0	109	109	2 to 9	None	[illegible]	[illegible]	[illegible]	[illegible]
Middletown	1	2	3	3	33	36	All	None *	[illegible]	[illegible]	[illegible]	[illegible]
Naugatuck	3	1	4	5	51	56	Elementary to second year in high school.	7 to second year school.	[illegible]	[illegible]	[illegible]	[illegible]
New Britain	5	5	10	8	126	134	All	7 and above	[illegible]	[illegible]	[illegible]	[illegible]
New Haven	11	8	19	32	457	489	All	4 to 7	[illegible]	[illegible]	[illegible]	[illegible]

44	New London	3	1		3	52	85	Elementary	7 to 8	5	1	6	3,315	450,000
45	Norwalk	2	0	2	8	83	91	Elementary	None[a]	0	2	16	3,939	196,800
	Norwich:													
46	Central district	1	0	1	2	37	39	All	Elementary	5	0	5	1,300	170,000
47	West Chelsea district	2	0	2	0	24	24	7 to 9	3 to 4	0	0	4	1,056	65,000
48	Stamford		4	15	12	94	106	All	None	6		21	*3,978	339,100
49	Torrington		0	7	2	84	86	1 to 9		0		11	2,200	228,000
50	Vernon[d]													
51	Wallingford (Central district).													
52	Waterbury	1	5	6	11	224	235	All	None	7		30	9,512	1,089,521
53	Willimantic[c]	3	0	3	5	36	41	All	None	3	0	10	1,141	126,000
	DELAWARE.													
54	Wilmington	2	20	22	9	253	262	All	4 to 8	0	3	29	11,080	931,965
	DISTRICT OF COLUMBIA.													
55	Washington*	27	10	38	156	1,234	1,390	All	5 to 8[f]	38	7	149	45,173	6,062,233
	FLORIDA.													
56	Jacksonville*	1	1	2	9	109	118	1 to 8	None	0	0	16	6,133	46,871
57	Key West	1	0		2	21	23	None	None	0	0	12	1,106	25,000
58	Pensacola*	1	0		5	51	56	All	None	0	0	12	4,976	65,070
59	Tampa	1			4	41	45	Elementary	None	0	0	*8	*1,700	45,000
	GEORGIA.													
60	Athens		0	1	3	34	37	All	None	1	1	7	1,480	30,000
61	Atlanta	9	22	31	10	244	254	Grammar grades	Grammar and two years in business high school.	0	1	28	13,204	813,000
62	Augusta	7		8	4	92	96	All	6 to 8	3	0	11	4,950	183,000
63	Brunswick[g]*			3	3	58	61	1 to 8	All			28	2,300	75,000
64	Columbus	3	3	6	9	70	79	All	All	1		12	3,265	188,500
65	Macon	6	11	17	5	126	131	Elementary	Elementary and 3 grades in high school.	0	0		5,657	170,050
66	Savannah		0		20	136	156	None	None	0	0	13	7,000	420,350
	IDAHO.													
67	Boise	2		3	6	50	56	Elementary	7 and above	0	0	6	2,600	175,000
	ILLINOIS.													
68	Alton	1	2	3	7	47	54	1 to 9		0	0	9	2,561	208,600
	Aurora:													
69	East Side	3	5	8	3	57	60	All	6 and above	0	0	8	2,350	262,000
70	West Side	1	2	3	4	21	25	All	Primary grades	0	0	3	1,400	126,500

*Statistics of 1903–4.
[a] Sewing.
[b] Includes training teachers from New Britain Normal School.
[c] School property owned by private corporation.
[d] Includes city of Rockville.
[e] Included in town of Windham.
[f] Seven and 8 in white schools.
[g] Statistics of Glynn County.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools.	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women.	Total.	Men.	Women.	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	ILLINOIS—continued.													
71	Belleville	1	0	1	10	55	65	All	None	0	0	7	3,300	$160,000
72	Bloomington	3	4	7	7	95	102	Elementary	All	0	0	11	4,250	500,000
73	Cairo	1	1	2	5	43	48	All	High school	0	0	12	2,222	160,000
74	Champaign	1	2	3	3	49	52	1 to 9	1 to 9	0	0	8	2,055	225,000
75	Chicago	180	122	302	275	5,139	5,414	All	Grammar and manual-training high school.	200	37	a 300	259,325	31,135,000
76	Danville	1	3	4	7	64	71	3 to 8 and first year high school.	None	0	0	10	3,684	297,900
77	Decatur	1	3	4	8	86	94	All	1 to 4	0	0	12	4,500	310,000
	Dixon:													
78	City proper	2	1	3	3	21	24	All	Elementary	0	0	4	1,000	75,000
79	North Dixon	1	3	4	0	15	15	All	All	1	0	2	548	57,500
80	East St. Louis	16	0	16	3	124	127	All	7 to 8	0	2	20	6,250	450,485
81	Elgin	2	3	5	7	105	112	All	High school	0	0	14	5,500	373,700
	Evanston:													
82	District No. 74 (North Evanston).[b]	0	1	1	0	10	10	.....	.....	0	0	1	.....	.....
83	District No. 75	1	3	4	1	61	62	All	6 to 8	4	0	6	1,800	300,000
84	District No. 76 (South Evanston).	1	0	1	0	35	35	All	None	2	0	3	1,280	175,000
85	Freeport	1	0	1	6	52	58	All	7 and above	0	0	8	2,377	205,600
86	Galesburg	2	3	5	8	71	79	Elementary	High school	0	0	9	3,620	301,200
87	Jacksonville	3	5	8	2	73	75	All	7 and above	0	0	7	2,520	250,000
88	Joliet	2	2	4	4	121	125	All	7 to 8	0	1	22	6,000	550,000
89	Kankakee	1	1	2	4	46	50	1 to 10	None	0	0	8	2,150	300,000
90	Kewanee	*1	*2	*3	10	56	66	All	High school	0	0	8	*2,550	*200,000
91	Lasalle	1	2	3	0	27	27	Elementary	High school	0	0	5	1,135	101,650
92	Lincoln	1	1	2	3	35	38	Elementary	1 to 7	0	0	8	1,650	140,225
93	Mattoon	1	1	2	3	49	52	Elementary	1 to 4	0	0	7	2,391	.....
94	Moline	3	11	14	5	92	97	All	5 and above	7	0	9	4,010	470,000
95	Monmouth	1	2	3	4	39	43	1 to 12	Elementary	0	0	5	1,976	142,161
96	Ottawa	3	1	4	0	39	39	All	None	0	0	6	1,860	106,000

97	Pekin	5	3	8	5	39	44	Elementary	Lower grades	0		7	2,000	170,500
98	Peoria	13	10	23	6	210	222	All	All	0		20	8,551	*1,617,000
99	Quincy	3	4	7	9	105	115	Elementary	Elementary	0		13	4,470	482,500
100	Rockford	1	2	3	0	160	169	1 to 12	7 to 12	0	0	18	6,604	489,000
101	Rock Island	5	2	7	5	85	88	All	All	0	0	10	3,882	400,000
102	Springfield	2	2		10	148	167	All	7 and above	0	0	17	6,742	532,382
103	Streator	3	1		0	50	50	1 to 4	4 to 5	0	0	10	2,500	210,000
104	Waukegan	1	4	5		47	53	All	All	0	0	5	2,000	168,000
	INDIANA.													
105	Alexandria	1	2	3	5	22	30	All	None	0	0	5	1,426	70,000
106	Anderson	3	2	5	14	79	93	All	None	2	0	11	4,366	256,000
107	Brazil	1	1	2	0	24	33	None	None	▸0	*0	4	*1,652	86,200
108	Columbus	3	1		10	34	44	Elementary	None	2	0	9	1,900	183,100
109	Elkhart	1		2	8	61	69	Elementary	None	0	0	9	2,500	205,000
110	Elwood	2	3	5	10	30	60	Grammar	6 to 8	0	0	7	2,800	200,000
111	Evansville	9	8	17	24	206	229	All	High school	7	0	22	9,500	850,000
112	Fort Wayne	3	2	5	13	163	176	All	High school	5	0	16	6,000	738,000
113	Hammond*	2	1	3	3	60	63	All	None	6	0	6	2,100	200,000
114	Huntington	1	4	5	3	40	48	All	Elementary	0	0	6	1,490	200,500
115	Indianapolis	15	29	44	68	720	789	All	4 to 8	...		60	28,000	2,825,129
116	Jeffersonville	1	0		9	41	50	All	None	0	0	5	2,006	120,000
117	Kokomo	1	0		11	52	63	Elementary	1 to 4	0	0	8	2,300	263,000
118	Lafayette	7	6	13		70	74	Elementary	1 to 3	0	0	9	.....	315,000
119	Logansport	1	2	3	8	58	66	Elementary	None	0	0	8	2,700	225,000
120	Marion	3		4	12	94	106	All	Elementary	0	0	13	4,000	275,000
121	Michigan City	3		4	5	57	62	All	None	7	0	10	1,690	170,000
122	Muncie	2	1	3	17	89	106	Elementary		2	0	9	4,025	204,000
123	New Albany	2		3	14	59	73	None	1 to 2	0	0	14	4,000	520,000
124	Peru	2	2	4	7	36	43	None	None	0	0		2,000	125,000
125	Richmond	3		4	9	77	86	1 to 12	Elementary	5	0	10	3,200	355,000
126	South Bend	7	8	15	4	133	137	Elementary	7 to 8 ◂	8	1	14	5,780	650,000
127	Terre Haute	2	2	4	32	204	236	All	All	23	2	25	8,481	690,702
128	Vincennes	1	1		10	38	48	Elementary	None	1	0	7	2,178	138,250
129	Wabash	0	3	3	3	51	54	All	"Lower" grades	0	0	6	2,000	251,000
130	Washington	2	0	2	6	30	36	None	None*	0	0		.....	150,000
	IOWA.													
131	Boone	2		3	2	52	54	Elementary	1 to 4	0	0	7	2,200	97,000
132	Burlington	7	8	15	6	98	104	Elementary	None	5	0	13	5,000	356,000
133	Cedar Rapids	3	14	17	6	146	152	All	6 to 7	4		15	*5,300	530,000
134	Clinton	3	7	10		92	96	All	2 years in high school*	0	0	13	3,600	300,000
135	Council Bluffs	2	8	10	4	131	135	All	None	11	0	14	*5,021	365,000
136	Davenport	6	1	7	23	165	188	All	8 and above	0	0	17	*7,750	*506,800
	Des Moines:													
137	Capital Park	1	7	8	2	24	26	All	8 and above	0	0	4	725	55,000
138	East side	1	3	4	4	103	107	All	None	0	0	11	3,700	303,180
139	West Side	3	24	27	17	225	237	Elementary	7 to 8	20		23	10,000	1,755,000

*Statistics of 1903–4. ▪ Includes 40 rented buildings. ▸Statistics from Biannual Report of the County Superintendent, 1903–4. ◂Cooking.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1905–6*—Continued.

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools.	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women.	Total.	Men.	Women.	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	IOWA—continued.													
140	Dubuque	4	5	9	11	120	131	All	High school	[illegible]	0	17	5,015	$400,000
141	Fort Dodge	1	[illegible]	3	3	[illegible]	55	All	[illegible]	[illegible]	[illegible]	[illegible]	2,212	181,000
142	Fort Madison	1	1	2	3	[illegible]	30	None	None	0	0	5	*1,200	80,000
143	Iowa City	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
144	Keokuk	3	0	3	3	57	60	Elementary	1 to 4	0	0	9	2,400	354,000
145	Marshalltown	1	[illegible]	3	1	66	67	All	1 to 7	7	*0	8	2,108	318,000
146	Muscatine	1	0	1	4	70	74	Elementary	None	0	0	10	2,882	151,190
147	Oskaloosa	3	0	3	3	49	52	Elementary	None	3	0	6	2,000	150,000
148	Ottumwa	1	2	3	3	111	114	All	None	0	0	11	3,000	[illegible]
149	Sioux City	11	15	26	8	153	161	All	None	0	1	25	6,500	827,339
	Waterloo:													
150	East Side	1	3	4	2	56	58	Elementary	1 to 7	4	0	7	1,800	210,000
151	West Side	1	0	1	0	37	37	Primary	None	1	0	4	1,200	130,000
	KANSAS.													
152	Atchison	1	0	1	4	40	44	All	6 and above	0	0	7	2,430	161,226
153	Emporia	2	1	3	3	44	47	Elementary	6 to 8	0	0	9	2,400	144,000
154	Fort Scott	2	0	2	8	42	50	Grammar	High school	1	0	8	2,500	120,000
155	Galena	1	0	1	2	23	25	1 to 8	[illegible]	0	0	5	1,000	90,000
156	Hutchinson	1	1	2	3	39	42	Elementary	None	0	0	7	2,405	110,000
157	Iola	0	2	2	5	50	55	Elementary	None	0	0	7	2,000	140,000
158	Kansas City	2	1	3	28	173	201	All	None	0	0	25	9,279	875,000
159	Lawrence	1	2	3	5	45	50	All	7 to 8	0	0	6	2,000	200,000
160	Leavenworth	1	0	1	4	70	74	All	None	0	0	9	3,070	138,000
161	Parsons	1	1	2	4	37	41	Elementary	8 A and above	0	0	5	2,010	145,000
162	Pittsburg	1	0	1	6	48	54	All	All	0	0	6	3,500	220,000
163	Topeka	3	2	5	28	161	189	All	5 and above	0	0	23	8,670	750,000
164	Wichita	2	2	4	6	114	120	Elementary	8 and above	0	0	15	6,320	800,000

	KENTUCKY.														
165	Bowling Green		0	1	4	22	26	All	All	0	0	4	1,300	37,000
166	Covington	11		13	9	17	126	1 to 9	7 to 12		1	12	5,040	225,000
167	Frankfort	3		4	1	23	24	All	7 and above		0	4	a 1,000	a 50,000
168	Henderson	1		3	0	44	50	1 to 12	Elementary	0	0	6	1,895	120,000
169	Lexington	2	0	2	4	126	129	All	None		1	9	6,000	215,000
170	Louisville	18	28	44	33	530	603	All	1 to 3 and high school	12	5	74	30,420	1,700,000
171	Newport													
172	Owensboro	2		3		45	56	All	None	0	0	7	3,100	125,000
173	Paducah													
	LOUISIANA.													
174	Baton Rouge*		0	1	1	34	35	All	None	0	0	2	900	100,000
175	New Orleans	3	11	14	17	777	794	Elementary and 3 years in high school.	None	20	1	72	33,800	2,000,000
176	Shreveport	4		7	6	32	37	All	All		0	3	1,971	250,000
	MAINE.													
177	Auburn	2		3	5	82	87	All	None	0	0	27	2,096	142,500
178	Augusta	2		3	4	41	45	All	None	0	0	20		b 154,364
179	Bangor	2		3	6	104	110	All	4 to 10	5	0	22	3,050	350,000
180	Bath*		0	1	6	43	54	All	6 to 11	0	0	15	2,571	150,000
181	Biddeford	1	0	1	7	42	49	Elementary	None		1	20		165,000
182	Lewiston	4	3	7	1	74	75	All	6 to 9	4	2	23		300,750
183	Portland	9	7	16	20	249	269	2 to 9	8 and above	9	1	37	8,736	b 688,450
184	Rockland	1	2	3	2	40	42	All	None	0	0	9	1,600	79,000
185	Waterville		2	3	4	45	46	All	None	0	1	7	c 1,400	90,000
	MARYLAND.													
186	Annapolis		0	1			31	7 to 11	4 to 8	0	0	2		* 30,000
187	Baltimore	33	23	56	151	1,495	1,646	All	All	19	17	143	78,225	3,175,996
188	Cumberland			2	8	30	38	All	All	0	0	5	* 2,800	120,000
189	Frederick	0	0	0	6	31	37	7 to 10	None	0	0	6	1,800	54,000
190	Hagerstown	2	0	2	12	43	55	Primary	None	0	0	7	2,800	100,000
	MASSACHUSETTS.													
191	Adams	4		5		45	46	All	5 to 7*	0	2	9	2,300	125,000
192	Amesbury		2	3	2		33	All	None	0	0	13	* 1,325	* 75,000
193	Arlington*	2	3	5		48	49	3 to 10	7 to 10	0	0	6	1,962	315,000
194	Attleboro	2		3		62	66	All	1 to 8	2	4	17	2,503	216,000
195	Beverly	6	8	14		72	77	All	1 to 8	0	11	12	3,409	352,000
196	Boston	21	0	30	249	2,160	2,418	Elementary	6 to 9	90	25	316	98,162	24,000,000
197	Brockton	2	2	4	15	189	204	All	High school	0	3	33		691,550
198	Brookline	5	3	8	16	133	149	All	All	11	2	16	4,462	1,525,000
199	Cambridge	10	5	24	24	389	413	All	Grammar and high school.		7	37	16,750	2,032,870
200	Chelsea	0	7	13		34	128	All	5 and above		1	14	7,361	858,850

*Statistics of 1903–4.

a For white schools only.

b From Maine school report, 1906.

c Includes 92 portable buildings.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools.	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women.	Total.	Men.	Women.	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	MASSACHUSETTS—continued.													
201	Chicopee	2	1	3	2	78	80	All	None	2	4	17	3,000	$200,000
202	Clinton	2	1	3	2	49	51	All	None	0	1	13	2,321	200,000
203	Danvers	2	2	4			45	All	None	0	0	9	1,012	135,500
204	Everett	8	11	19	3	150	153	All	8 to 9	0	4	17	7,000	607,400
205	Fall River	3	2	5	23	424	447	Elementary	High school	3	*19	53	16,847	1,872,950
206	Fitchburg	4	7	11	11	105	116	All	6 to 11	0	5	24	5,100	700,000
207	Framingham	3	0	3	5	50	55	All	7 to 9 of normal practice school.	0	1	16	2,527	.....
208	Gardner	1	3	4	2	51	53	All	None	0	1	10	2,531	224,000
209	Gloucester	4	2	6	3	121	124	All	None	0	2	24	5,250	400,000
210	Greenfield	2	2	4	2	46	48	All	3 to 9	2	1	16	1,800	200,000
211	Haverhill	8	6	14	0	157	157	All	7 and above	6	5	33	*6,500	656,567
212	Holyoke	9	9	18	11	162	173	All	High school	7	6	17	6,751	906,600
213	Hyde Park	3	1	4	6	44	50	All	Elementary	0	1	9	.....	315,000
214	Lawrence	19	6	25	17	233	250	All	High school	0	53	30	9,000	1,335,100
215	Leominster[a]	2	3	5	4	54	58	.....	.....	.....	.....	10	.....	189,950
216	Lowell	3	4	7	20	284	304	All	10 to 13	12	16	53	14,072	1,700,000
217	Lynn	9	7	16	14	242	256	All	8 and above	0	10	43	14,156	1,394,800
218	Malden	9	2	11	8	168	176	All	9th	0	2	18	7,637	770,865
219	Marlboro	2	1	3	5	64	69	All	None	0	5	10	2,930	275,000
220	Medford	1	0	1	17	91	108	1 to 8	6 to 9	7	1	18	4,584	750,000
221	Melrose	6	2	8	4	87	91	All	7 to 9	8	0	13	3,200	447,325
222	Milford	1	2	3	3	46	49	All	None	1	1	17	*2,004	180,000
223	Natick	1	0	1	5	48	53	All	All	0	0	11	1,800	125,000
224	New Bedford	8	9	17	13	238	251	All	8 to 9	3	7	30	10,186	1,188,363
225	Newburyport	1	0	1	5	51	56	All	None	0	2	13	2,355	278,000
226	Newton	2	2	4	19	196	215	All	4 to 9	14	2	23	7,268	1,345,260
227	North Adams	3	8	11	5	96	101	All	7 to 9	0	14	13	3,775	450,000
228	Northampton	3	2	5	3	89	92	All	5 to 7*	4	3	21	3,500	403,000
229	Peabody	1	2	3	4	54	58	All	None	0	1	9	2,550	250,000
230	Pittsfield	3	4	7	9	121	130	All	None	2	1	24	4,923	995,000
231	Plymouth	1	0	1	5	52	57	All	6 to 9	0	0	26	1,900	140,000
232	Quincy	2	2	4	14	123	137	1 to 12	5 to 8	0	0	14	6,065	577,625

233	Revere			5	2	71	73	All	None	0	0	11			366,000
234	Salem		0		12	128	140	All	8 to 9	5	4	24	5,988		545,000
235	Somerville		5	8	27	285	312	All	10 to 13		5	25	12,296		1,324,480
236	Southbridge		2	3		34	35	All	None	0	4	12	1,433		134,780
237	Springfield	13		20	22	337	350	2 to 9	6 to 9	14	7	34	1,300		2,317,841
238	Taunton	2		5	11	128	130	1 to 10	6 to 10	0	9	31	6,610		446,200
239	Wakefield	4				54	61	All	5 to 9	0	0	10	2,549		310,150
240	Waltham	6	2	8	6	88	94	All	6 to 13	0	3	16	3,818		578,642
241	Ware	2	1	3	3	32	35	All	None	0	0	12	1,360		120,375
242	Watertown		0		6	43	49	2 and above	6 to 8	0		9	1,822		
243	Webster	2			2	22	24	All	None	0	2	8	876		161,950
244	Westfield	5	2		2	66	68	All	Elementary	5		14	2,200		285,100
245	Weymouth	2		3	8	54	62	All	5 to 9	0		18			181,400
246	Woburn		0			67	72	1 to 13	None	0	1	15	3,160		242,574
247	Worcester	4	2	6	60	554	614	All	5 and above	17	10	71	24,392		2,655,802
	MICHIGAN.														
248	Adrian	1	0		3	43	46	1 to 10	None[a]	0	0	6	1,600		175,000
249	Alpena[b]	1	2		3	41	44	None	None	0					80 000
250	Ann Arbor	1	2	3	9	63	72	All	Elementary	0	0	14	2,170		250,000
251	Battle Creek	3	3	6	8	89	97	All	All	0	0	11	[a]3,586		[a]400,000
252	Bay City	2	5	7	10	117	127	Elementary[c]	9 to 12		3	10	4,819		326,500
253	Calumet school district	3	3	6	8	135	143	All	5 and above	14		20	5,750		200,000
254	Detroit	27	49	76	47	947	994	All	4 to 8	47	8	73	40,471		4,000,000
255	Escanaba		0		2	52	54	All	None	0	0	6	1,800		200,000
256	Flint	2	2		2	65	67	Elementary	7 and above	4	0	8	2,939		300,000
257	Grand Rapids	7	35	42	18	362	380	All	Grammar	32		39	14,985		1,376,200
258	Holland	1	2	3	2	32	34	All	None		0	5	1,896		100,000
259	Iron Mountain			2	6	55	61	All	7 to 12	0	0	9	2,574		200,000
260	Ironwood		2	3		60	63	Elementary	None	6	0	9	2,650		225,000
261	Ishpeming[a]		2	4	2	70	72	All	7 to 12	5	0	10	3,000		200,000
262	Jackson		2	3	6	91	97	All	None	0	0	16	3,932		250,000
263	Kalamazoo		2	3	9	121	130	1 to 12	1 to 12	8		11	5,670		600,000
264	Lansing		2	3	5	81	86	Elementary	Elementary	0	0	13	3,090		210,000
265	Manistee			3	3	70	73	1 to 12	None	6	6	6	5,208		140,000
266	Marquette	2		6	3	45	48	Elementary	7 to 12	2	0	10	1,852		291,000
267	Menominee	3		5	5	59	64	1 to 9	5 to 11	6	0	8	2,457		160,000
268	Muskegon	3		6	5	80	94	All	All	8	1	14	4,000		352,340
269	Owosso		2		4	39	43	Elementary	None	0	0	4	2,080		160,000
270	Pontiac		2	3	2	43	45	Elementary	1 to 6	4	0	7	1,780		250,000
271	Port Huron	2	1	3	4	70	83	Elementary	None	0	0	12	3,500		625,450
	Saginaw:														
272	East Side	3		10	11	124	135	All	1 to 12	0	0	13	5,146		445,147
273	West Side	4	3		4	76	80	All	All	0	0	10	3,300		243,872
274	Sault Ste. Marie	2	3		8	47	55	1 to 12	6 to 12	3	0	7	2,480		265,000
275	Traverse City		2	3	5	54	59	All	1 to 6	5	0	6	2,400		160,000
276	West Bay City			2	7	55	62	Elementary	None[a]	0	0	8	2,560		215,000

[a] Statistics of 1903–4.
[b] From State school report, 1904.
[c] Optional in high school.
[d] From Annual Report School Committee, 1905.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools.	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women.	Total.	Men.	Women.	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	MINNESOTA.													
277	Brainerd	1	2	3	3	50	53	Elementary	None	0	0	6	2,450	$188,524
278	Duluth	4	14	18	12	260	272	All	High school	12	0	31	11,410	1,947,990
279	Faribault	1	2	3	3	30	33	All	High school	0	0	7	*1,300	90,000
280	Mankato	1	1	2	3	39	42	Elementary	8th and 2 years in high school.	0	0	5	1,750	127,534
281	Minneapolis	16	53	69	37	890	927	All	7 and above	4	0	61	40,000	2,800,000
282	St. Cloud	1	1	2	4	35	39	All	7 and above	0	0	6	1,400	101,000
283	St. Paul	15	30	45	27	590	617	All	All	33	0	50	29,822	2,296,150
284	Stillwater	1	2	3	2	49	51	1 to 10	9th	0	0	7	2,100	265,000
285	Winona	1	3	4	6	83	89	All		7	0	9	.....	360,000
	MISSISSIPPI.													
286	Jackson	2	1	3	3	36	39	1 to 7	None	0	0	4	1,980	150,000
287	Meridian	2	1	3	3	57	60	None*		0	0	7	*2,650	*130,000
288	Natchez	2	0	2	1	32	33	All	None	2	0	2	1,800	52,500
289	Vicksburg*	4	1	5	3	48	51			1	.....	5	2,500	200,000
	MISSOURI.													
290	Carthage	1	2	3	9	38	47	1 to 10	7 to 9	0	0	8	2,140	150,000
291	Hannibal	5	3	8	2	60	62	Elementary and 1 year in high school.	5 and above	0	0	9	2,720	250,000
292	Jefferson City	1	0	1	4	27	31	Elementary	None	0	0	6	.....	.....
293	Joplin	2	1	3	13	97	110	Elementary	1st high school	0	0	*16	*5,335	300,000
294	Kansas City	31	17	48	75	645	720	All	All	22	0	58	32,673	3,000,000
295	Moberly	1	0	1	7	29	36	Elementary	High school	0	0	5	1,800	128,000
296	St. Charles	.....	.....	.....	.....	.....	18	.....	.....	.....	.....	.....	.....	.....
297	St. Joseph	3	2	5	25	251	276	1 to 9	1 to 9	0	0	36	12,136	*1,025,000
298	St. Louis	65	47	112	212	1,820	2,032	All	7 and above	133	13	127	82,049	8,743,937
299	Sedalia	3	0	3	4	64	68	Elementary	None	0	0	11	3,350	200,000
300	Springfield	2	0	2	8	84	92	Elementary	None	0	0	12	5,220	200,000
301	Webb City	1	2	3	5	32	37	Elementary	None	0	0	5	2,500	180,000

	MONTANA.													
302	Anaconda	2	0	2		44	46	None	None	0	0	5	1,600	225,000
303	Butte	5	11	16	5	79	184	All	Industrial school	0	0	20	8,200	780,000
304	Great Falls		2	3	3	61	64	1 to 10	None	0	0	12	2,900	260,175
305	Helena	4	11	15	3	52	55	All	5A to 8A	6	0	9	2,310	460,000
	NEBRASKA.													
306	Beatrice		0	3	2	42	44	Elementary	None	0	0	8	2,100	85,000
307	Hastings		2	3	2	39	41	All	None	0	0	0	2,325	220,000
308	Lincoln	3	1	4	12	181	193	Elementary	None	13		18	7,000	625,698
309	Omaha	3	37	40	14	378	392	All	4 to 12	32	2	35	18,386	2,000,000
310	South Omaha	2	6	8	4	114	118	All	None	0	0	14	5,200	526,000
	NEW HAMPSHIRE.													
311	Berlin			2	2	25	27	All	6 to 8		0	6	1,200	47,000
	Concord:													
312	Union district			2	8	82	90	All	7 and above	3	0	10	3,011	415,000
313	Penacook district No. 20			2		7	8	All	None	0	0	2	340	19,500
314	Dover	2		3		37	41	All	None	0	1	14	1,700	*275,000
315	Keene (Union district)	2		3	4	46	50	All	None	2	0	14		141,930
316	Laconia		0		3	32	35	All	None	0	0	10	1,500	105,000
317	Manchester	3		4	16	127	143	All	8 to 9		4	25	5,733	790,105
318	Nashua	3		6	0	85	85	All	None		3	20	3,200	378,433
319	Portsmouth	5	2	5	5	50	61	All	None	4	0	11	1,780	120,000
320	Rochester	2		3	4	35	37	All	None	0	0	8	*1,300	140,000
	NEW JERSEY.													
321	Atlantic City	2	9	11	5	120	125	All	3 to 11	0	0	10	5,780	557,650
322	Bayonne	8	2	10	3	171	174	All	2 and above	7		11	5,804	551,450
323	Bloomfield	3	5	8	3	58	61	All	All	5	1	7	2,287	300,000
324	Bridgeton		0	1	2	50	52	Elementary	None	0	0	5	2,500	129,200
325	Camden	7	3	10	9	331	340	All	All	7	5	30	12,903	1,020,300
326	East Orange	9	2	11	8	105	113	All	All		0	8	4,581	758,000
327	Elizabeth	2	0	2	1	144	155				0	10	7,412	427,000
328	Harrison	1	0		4	24	28		None		1			
329	Hoboken	7	2		2	211	213	5 and above	5 and above	8	1	10	9,188	*620,000
330	Jersey City	19	31	50	3	609	612	All	None	5	5	42	28,913	2,374,488
331	Kearney	1		4	5	52	57	1 to 12	None	0	0	7	2,453	278,000
332	Long Branch	2		5	5	56	61	All	Elementary	3	0	9	3,206	291,400
333	Millville			2	3	47	50	All	None	1	3	14	2,472	90,000
334	Montclair	3	2	5	12	93	105	Elementary and first year of high school.	Elementary	7		10	3,480	360,000
335	Morristown				2	36	38	All	None	0	0	3	1,552	120,000
336	Newark	45	17	62	34	951	985	All	All	103	14	57	46,109	3,188,000
337	New Brunswick	1	0		6	61	67	All	None			6	2,656	210,000
338	Orange	8	6	14	5	83	88	All	All	6	0	7	3,286	385,000
339	Passaic	3	15	18	4	132	136	All	4 to 8	9	2	10	6,600	270,000

*Statistics of 1903-4.

*From State school report, 1904.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools.	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women.	Total.	Men.	Women.	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	NEW JERSEY—continued.													
340	Paterson	22	3	25	9	386	395	All	7 and above	18	5	22	15,693	$950,000
341	Perth Amboy	1	0	1	7	73	80	2 and above	None	1	0	7	3,741	255,000
342	Phillipsburg	1	1	2	5	43	48	2 to 10		0	1	9	1,945	110,000
343	Plainfield	3	4	7	3	71	74	All	None	5	0	8	3,000	245,000
344	Rahway	1	1	2	4	35	39	All	None	0	0	6	1,500	100,000
345	Town of Union	5	1	6	4	58	62	All	Grammar and high school	3	0	4	3,340	230,000
346	Trenton	4	18	22	7	243	250	All	None	19	27	32	11,093	846,119
347	West Hoboken	2	8	10	4	79	83	All	None	5	0	5	4,500	280,000
	NEW YORK.													
348	Albany	18	9	27	9	282	291	All	High school	23	5	22	13,221	1,280,000
349	Amsterdam	3	3	6	11	66	77	1 to 9	6 to 7	7	0	10	3,500	277,940
350	Auburn	5	20	25	6	104	110	All	1 to 8	5	0	14	4,253	468,030
351	Batavia	2	3	5	0	40	40	3 to 8	None	0	1	7	1,700	203,944
352	Binghamton	2	1	3	14	210	224	All	9 to 12	13	1	16	7,200	478,497
353	Buffalo	65	36	101	22	1,235	1,257	All	All	23	13	94	66,075	4,394,402
354	Cohoes	2	1	3	2	63	65	All	None*	4	1	10	2,800	110,536
	Corning:													
355	District No. 9	1	2	3	0	27	27	1 to 8	None	0	0	2	1,415	100,000
356	District No. 13													
357	Cortland	1	2	3	0	30	30	All	None	1	0	4	1,400	82,100
358	Dunkirk	1	1	2	3	54	57	All	None	0	0	8	3,265	200,000
359	Elmira	8	7	15	3	145	148	1 to 8	None	0	1	12	5,906	606,700
360	Geneva	1	1	2	3	51	54	All	None	4	0	5	1,583	156,353
361	Glens Falls											*5	*1,579	
362	Gloversville	1	0	1	2	77	79	Elementary	None	7	0	10	3,550	155,850
363	Hornellsville	1	6	7	1	58	59	All	1 to 8*	4	0	5	2,094	156,950
364	Hudson	1	2	3	2	29	31			0	0	4		*a 95,000
365	Ithaca	2	2	4	6	54	60	All	6 to 8	2	0	7	2,300	268,000
366	Jamestown	4	0	4	5	115	120	All	All	9	0	12	4,000	397,765
367	Johnstown	1	0	1	3	42	45	All	None	2	0	5	2,420	149,185
368	Kingston	11	2	13	5	87	92	1 to 8	High school*	0	0	10	4,164	367,904

369	Lansingburg	1	0			61	65	All	None	5	0	6	2,400	166,200
370	Little Falls	1	2	3		30	35	All	1 to 4	3	0	4	1,350	212,000
371	Lockport	1		2		86	90	1 to 10	1 to 7	3	0	10	4,000	390,100
372	Middletown		2	3		54	58	All	1 to 6	0	0	7	1,954	266,000
373	Mount Vernon	6	2	8	2	111	113	All	None	6	1	10	4,985	533,370
374	Newburgh	7	2	9	5	96	101	1 to 7	8 to 11	0	0	7	3,971	450,000
375	New Rochelle	3	8	11		93	98	All	5 to 8	7		13	3,600	357,400
376	New York	256	518	774	1,376	11,727	13,003	All	7 to 8	491	84	547	570,501	81,469,847
377	Niagara Falls	5	9	14	2	112	114	All	6 and above	8	2	11	4,829	449,356
378	North Tonawanda	4	2		7	54	61	All	5 and above	4	0		1,967	241,200
379	Ogdensburg		3	4	4	59	63	1 to 8	1 to 4	0	0	9	2,510	173,820
380	Olean school district	2	1	3		59	62	All	5 to 8	6	0	6	2,663	198,800
381	Oswego	2	0	2	5	87	92	All	None	0	0	15	*3,500	173,458
382	Peekskill. District No. 7 (Drum Hill).	1	0		0	27	27	All	None	1	0	3	1,138	68,850
383	District No. 8 (Oakside).	1	2	3	0	19	19	All	None	0	0	1	370	93,400
384	Plattsburg		10	11		38	39	1 to 9	None	4	0	8	2,127	127,726
385	Port Jervis		2	3		41	45	All	None	1	0		2,092	106,542
386	Poughkeepsie	4		5		86	91	All	1 to 8*	4		12	3,593	255,800
387	Rochester	15	28	43	17	592	609	All	Elementary	32		36	20,787	2,428,000
388	Rome	1	2	3	3	53	56	All	None	5	0	8	1,973	234,325
389	Saratoga Springs	2	0	2		58	60	1 to 8	None	5	0	6	2,694	228,950
390	Schenectady	4	6	10	7	149	156	All	All	8	1	12	5,500	630,000
391	Syracuse	15	39	54	24	482	506	All	7 and 8, elementary, and business high.	25		39	21,369	2,126,262
392	Troy	8	5	13	5	215	220	All	None	8	3	25	8,584	825,000
393	Utica	5	6		14	239	253	All	1 to 8	15		28	9,753	675,093
394	Watertown	2	4	6		117	118	Elementary and first year in high school.	None	4		13	4,500	490,000
395	Watervliet			4	1	48	49	All	None	3	0		1,831	120,500
396	White Plains			5	3	37	40	1 to 8	Elementary	4	1	4	1,700	80,249
397	Yonkers	3	9	12	14	231	245	All	All	14	3	21	9,975	1,354,870
	NORTH CAROLINA.													
398	Asheville		3	5	5	42	47	1 to 7	1 to 9	0	0	7	2,350	100,000
399	Charlotte			2	5	36	41	All	None	0	3	3	2,766	107,000
400	Concord		1	3	2	22	24	None		0	0	3	1,200	45,000
401	Durham	2	3	5	10	43	53	1 to 10	7 to 10	0	0	6	2,200	115,000
402	Greensboro	2		5	7	46	53	1 to 7	1 to 7	1		7	2,000	75,000
403	Newbern	2	0	2	4	20	24	None	None	0	0	6	800	60,000
404	Raleigh [b]		0		4	69	73							118,000
405	Wilmington		2	3	3	53	61	All	None	0	0	5	3,020	110,000
406	Winston*		0		7	30	37	None		0	0	4	1,480	75,000
	NORTH DAKOTA.													
407	Fargo	1	5		4	52	56	All	8 and first year in high school.	0	0	7	*2,000	225,000
408	Grand Forks	1	0		4	45	49	All	None	0	0	*3	*2,200	150,000

* Statistics of 1903–4.

* Real estate only.

[b] From biennial State school report, 1903–4.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools.	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women.	Total	Men.	Women.	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	OHIO.													
409	Akron	10	9	19	11	195	206	All	None	15	4	18	11,000	$1,010,000
410	Alliance	3	0	3	9	30	39	All	None	0	0	7	1,800	161,500
411	Ashtabula*	1	0	1	5	45	50	All		0	0	8	2,068	161,000
412	Bellaire	1	0	1	4	38	42	All	None	0	0	7	1,920	120,000
413	Cambridge	1	0	1	5	38	43	None	None	0	0	5	2,068	132,000
414	Canton	3	3	6	16	140	156	All	7 to 8	1	0	17	7,900	410,000
415	Chillicothe*			3	8	62	70		None	0		7		160,000
416	Cincinnati	40	0	40	130	528	998	All		0	6	88	45,437	4,300,000
417	Cleveland	17	76	93	94	1,360	1,454	All	All	23	41	82		7,232,000
418	Columbus	6	28	34	31	497	528	All	None	0	2	38	*26,000	*2,502,685
419	Dayton	16	15	31	30	346	376	Elementary	7 to 8 elementary, optional in high school.	22	2	32	14,800	1,541,467
420	East Liverpool	2	1	3	9	67	76	All	None*	0	0	13	3,000	260,000
421	Elyria	1	0	1	5	53	58	Elementary	5 to 10	0	0	*8	*1,560	*191,000
422	Findlay*			2	11	73	84		None	0		14		305,000
423	Fremont	1	0	1	6	34	40	Elementary	None	3	0	6	1,800	75,000
424	Hamilton	2	1	3	15	98	113	All	None	0	0	10	4,124	400,000
425	Ironton*	1	0	1	6	47	53	None		0	0	7	2,600	180,000
426	Lancaster	1	1	2	4	41	45	Elementary	None	0	0	5	2,000	225,000
427	Lima	1	0	1	4	104	108	All	None	0	0	18	5,000	400,000
428	Lorain	1	1	2	7	78	85	Elementary		0	0	9	4,500	375,000
429	Mansfield	3	2	5	7	97	104	All	Kindergarten to 3	7	0	11	3,800	449,319
430	Marietta			4	6	55	61		None	0		10		195,000
431	Marion	1	0	1	3	64	67	All	None	0	0	8	2,700	300,000
432	Massillon	3	1	4	8	45	53	All	None	0	0	8	2,600	300,000
433	Middletown*	1	3	4	6	38	44	All	None	0	0	4	1,785	200,000
434	Newark	5	2	7	4	86	90	1 to 9	7 to 8	0	0	14	4,000	450,000
435	Piqua	1	0	1	6	52	58	All	None	0	0	8	2,100	200,000
436	Portsmouth	2	1	3	1	76	77	Elementary	None	0	0	14	3,074	311,500
437	Sandusky	2	2	4	4	71	75	Elementary	None	0	0	8	3,246	*216,400
438	Springfield	5	2	7	22	143	165	All	None	1	0	17	7,784	680,000
439	Steubenville	1	2	3	6	88	94	All	None	0	1	7	2,800	170,000

440	Tiffin	2	2	4	2	32	36	1 to 9	None	0	0		1,600	150,000
441	Toledo	10	19	29	29	454	483	1 to 8	1 to 8	35	0	43	23,585	1,647,747
442	Warren	5	2	7	5	44	49	All	1 to 4	0	0	8	*2,000	235,000
443	Wellston	1	0	1	5	35	40	All	None	*0	*0	5	1,800	75,000
444	Xenia		0	1		43	47	1 to 8	None		1	6	1,944	186,200
445	Youngstown	10	9	19	0	188	188	All	High school	1	0	25	8,125	800,000
446	Zanesville[a]	3	1	4	0	93	99	First 10		0	0	19	4,000	400,000
	OKLAHOMA.													
447	Guthrie													
448	Oklahoma City		2	3	10	96	106	Elementary	High school	3	0	8	4,000	450,000
	OREGON.													
449	Astoria		0	1		28	32	All	None	0	0	6	*1,446	92,000
450	Portland	17	5	22	15	322	339	All	5 to 9	0	3	30	16,200	*1,385,706
	PENNSYLVANIA.													
451	Allegheny	25	4	29	45	401	446	All	All	18	5	31	20,000	3,066,519
452	Allentown		2	3	28	11	139	Elementary	None	0	3	17	6,800	319,352
453	Altoona		2	3	23	148	171	All	All	4	8	18	7,910	658,000
454	Beaver Falls	1	0	1	3	47	50	1 to 8	None	0	0	5	2,000	135,000
455	Braddock	3	6	9	2	42	51	All	8 and above	0	0	4	2,800	475,000
456	Bradford		0	1	8	58	66	1 to 8	7 to 8 elementary; 1 to 2 high school.	0	0	6	3,100	200,000
457	Butler	3	2	5		58	59	1 to 9	None	0	0	5	2,700	193,500
458	Carbondale	1		2	7	55	62	All	None	0	5	10	2,946	190,000
459	Carlisle	1	0	1	10	24	34	All	Two	0	0	8	1,000	111,600
460	Chambersburg	1	0	1	6	32	37	None	None	0	0	8	1,800	100,000
461	Chester	3	2	5	6	143	149	None	None	0	0	22	6,446	700,000
462	Columbia			2	3	41	44	Elementary	None	0	0	6	2,200	101,300
463	Danville			2	5	25	30	None	None	0	0	5	1,800	100,000
464	Dubois	2	0	2	7	40	47	Elementary	None	0	0	4	1,900	175,000
465	Dunmore[a]	1	0	1	6	52	58						2,700	
466	Duquesne	2	5	7		60	61	All	None	0	0	7	2,460	140,000
467	Easton	2	3	5	22	90	112	All	None	0	0	16	5,187	651,351
468	Erie	4	20	24	7	201	208	All	6 to 8	1	2	18	7,852	1,000,000
469	Harrisburg	4		5	37	194	231	All	High school	0	0	28	9,540	934,899
470	Hazelton	2		3	8	55	63	All	None	0	0	8	3,010	250,000
471	Homestead		6	7	2	50	52	All	5 to 8	0	0	6	2,100	350,000
472	Johnstown	3		5	27	129	156	All	7 and above*	0	0	25	*6,854	640,000
473	Lancaster		0	4	10	11	121	All	None	0	7	19	6,000	638,950
474	Lebanon			2	7	67	74	Elementary	None	0	0	12	3,000	370,000
475	McKeesport	15	1	16	18	140	158	All	None	0	0	12	*7,250	647,259
476	Mahanoy City		0	1	8	39	47	All	None	0	2	5	2,300	115,000
477	Meadville		3	4	0	51	51	Elementary	5 to 7	0	0	5	2,417	210,000
478	Mount Carmel		0	1	6	38	44	All	None*	0	2	6	2,342	90,000
479	Nanticoke[b]		0	1	10	40	50					8	2,550	
480	Newcastle	2	0	2		131	137	All	None		0	14	5,250	445,604
481	Norristown		0	1		73	80	4 and above	7 and above		0	9	3,500	350,000

* Statistics of 1903–4.

[a] From State school report, 1904.

[b] From State school report, 1905.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools.	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women	Total.	Men.	Women	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	PENNSYLVANIA—continued.													
482	Oil City[a]	1	0	1	5	57	62					11	2,600	
483	Philadelphia	73	125	198	203	3,603	3,806	All	3 to 8	143	47	329		$14,767,800
484	Phoenixville	1	0	1	2	29	31	All	None	0	0	4	1,500	90,000
485	Pittsburg	34	23	57	30	1,110	1,140	All	5 to 8	35	*4	88	53,000	5,000,000
486	Pittston[a]	1	0	1	2	39	41					10	3,000	
487	Plymouth	2	0	2	5	35	40	None*	None*	0	6	5	2,500	100,000
488	Pottstown	1	0	1	11	60	71	High school	None	0	0	23	2,947	205,112
489	Pottsville	1	0	1	7	52	59					10	3,000	
490	Reading	1	5	6	9	325	334	All	None	0	11	47	14,000	1,216,850
491	Scranton	11	12	23	26	347	373	All	None	21	0	*49	*17,500	2,011,740
492	Shamokin	1	1	2	12	60	72	Elementary	None	0	3	8	3,650	300,000
493	Sharon	3	1	4	1	43	44	1 to 9	None*	0	0	5	2,375	250,000
494	Shenandoah	1	2	3	7	59	66	All	None	0	8	10	3,786	165,000
495	South Bethlehem	1	1	2	10	42	52	All	None	0	0	6	2,246	161,457
496	Steelton	1	2	3	16	32	48	All	None	0	0	6	2,352	325,000
497	Sunbury	1	1	2	9	37	46	2 to 10	None	0	0	9	2,500	100,000
498	Titusville	1	0	1	4	44	48	All	3 to 7	4	0	5	1,800	115,667
499	Warren	1	0	1	6	45	51	High school	5 and above	0	0	8	2,000	277,650
500	Washington	4	6	10	2	61	63	None	None	0		8	3,200	493,000
501	Westchester	1	0	1	7	34	41	All	All	0	0	4	1,495	160,000
502	Wilkesbarre	1	2	3	32	161	193	All	High school	3	15	20	10,182	596,000
503	Wilkinsburg	2	4	6	3	61	64	Elementary and 2 years in high school.	None	0	0	4	2,800	325,000
504	Williamsport	1	1	2	21	99	120	1 to 9	None	0	1	15	6,260	395,000
505	York	2	1	3	29	119	148	All	None	0	0	20	6,500	811 823
	RHODE ISLAND.													
506	Central Falls	1	2	3	2	54	56	All	None	0	4	9	2,220	204,000
507	Cranston	0	2	2	8	59	67	Elementary	None	4	0	17	2,660	200,000
508	Cumberland	1	0	1	3	37	40	Elementary	None	0	5	17	1,607	91,200
509	East Providence	1	0	1	5	58	63	All	None*	0	1	13	2,500	180,000
510	Lincoln	1	1	2	3	31	34	1 to 9	None*	0	0	12		35,000

511	Newport	1	0	1	12	84	96	Kindergarten to 12	4 to 12	5	6	15	3,758	396,938
512	Pawtucket	6		8	4	173	177	All	None	12	6	28	6,615	854,300
513	Providence	3	9	12	57	643	700	All	High school	26	17	101	29,583	2,778,449
514	Warwick	1	0	1	5	60	77	All	None	*0	*7	23	4,000	175,000
515	Woonsocket	2		3	4	99	103	All	7 to 9	3	4	21	4,244	380,000
	SOUTH CAROLINA.													
516	Charleston	5	5	12	3	105	106	All	Elementary	0	0	6	7,527	231,181
517	Columbia		1	2	7	40	47	All	Elementary	0	0	7	2,275	53,500
518	Greenville[a]		0		4	36	40							54,000
519	Spartanburg			2	3	35	38	1 to 8	8 to 9	0	0	5	2,100	74,000
	SOUTH DAKOTA.													
520	Sioux Falls	3	0	9	1	59	60	All	All	2	0	10	2,531	325,000
	TENNESSEE.													
521	Chattanooga	6	3	9	5	89	94	Elementary	None	0	0	8	*4,262	464,109
522	Clarksville	2	0	2	8	22	30	All	None	0	0	2	1,500	22,500
523	Jackson	0		13	4	36	40	1 to 7	2 to 8	0	0	5	3,000	80,200
524	Knoxville		1	5	1	93	100	1 to 7	All	0	0	14	4,450	177,400
525	Memphis		0		27	236	263	None	None	0	1	28	11,156	635,954
526	Nashville	10		11	32	200	232	1 to 11	1 to 9	0	1	19	10,481	565,000
	TEXAS.													
527	Austin		0		17	66	83	1 to 7	7 to 10	0	0	12	3,875	207,915
528	Beaumont		0		9	41	50	All	6 to 11	0	0	6	2,600	155,800
529	Cleburne		0		4	37	41	1 to 7	1 to 4	1	0	8	1,970	61,185
530	Corsicana		0			37	38	1 to 7	First	0	0	6	1,374	125,000
531	Dallas	7	3	10	16	108	184	All	9 to 12	0	1	18	9,341	444,541
532	Denison	1	1	2	5	42	47	1 to 8	None	0	0	10	2,300	355,000
533	El Paso		6		6	76	82	All	None	3	0	8	3,200	365,000
534	Fort Worth	3	1		22	83	110	1 to 9	8 to 11	0	0	13	5,289	267,300
535	Gainesville	1	0		4	30	34	1 to 8	None			5	1,300	120,973
536	Galveston	9	0	9	16	81	97	1 to 8	None	0	0	8	4,321	448,000
537	Houston	2	2		38	171	209	1 to 7	None	0	0	20	8,281	549,538
538	Laredo	1	0		0	23	22	4 to 10	None	0	0	7	[b]894	14,150
539	Marshall		0		7	21	28	1 to 7	1 to 3	0	0	6	1,240	156,400
540	Palestine		0	1	11	29	40	3 to 6	None	0	0	7	1,821	73,280
541	Paris	1	0	1	7	51	58	Elementary	High school	0	0	7	2,600	93,100
542	San Antonio	7	7	14	22	147	169	1 to 8	4 and above	0	0	27	8,895	434,275
543	Sherman		0		5	38	43	All	All	0	0	5	2,103	101,100
544	Tyler[b]		0	1	4	7	13			0	0	8	1,506	62,500
545	Waco		0	1	15	76	91	1 to 4	None	0	0	15	4,054	223,250
	UTAH.													
546	Ogden		2	10	20	86	108	All	None	4	1	16	4,400	284,900
547	Salt Lake City	23	7	30	21	310	331	All	All	1	0	26	14,426	1,284,049

* Statistics of 1903–4.

[a] From State school report, 1905.

[b] From biennial State school report for 1903 and 1904.

TABLE 7.—*Statistics of supervising officers, teachers, property, etc., in public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	Supervising officers.			Regular teachers.			Grades in which drawing is given.	Grades in which manual training other than drawing is given.	Number of kindergartens.	Number of evening schools.	Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.
		Men.	Women.	Total.	Men.	Women.	Total.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	VERMONT.													
548	Barre	1	2	3	3	52	55	All	None	0	0	9	2,000	$181,900
549	Burlington	1	2	3	8	76	84	All	None	6	2	13	3,600	407,700
550	Rutland	1	2	3	2	44	46	1 to 9	None	4	0	13	2,200	56,000
	VIRGINIA.													
551	Alexandria	1	0	1	8	25	33	All	None	0	0	5	1,550	40,000
552	Danville	2	0	2	5	50	55	Elementary	None	0	0	5	2,500	49,000
553	Lynchburg	2	6	8	6	63	69	All	6 to 7	0	0	9	3,000	130,000
554	Manchester													
555	Newport News	3	2	5	4	47	51	All	All	0	0	6	2,150	125,000
556	Norfolk	2	2	4	16	94	110	1 to 7	1 to 7	3	4	16	5,100	450,000
557	Petersburg	1	2	3	2	51	53	Elementary	Primary	0	0	8	3,025	75,000
558	Portsmouth	1	0	1	3	38	41	None	None	0	0	7	2,000	47,000
559	Richmond	20	13	33	12	245	257	1A to 7B	1A to 7B	5	6	19	12,253	579,000
560	Roanoke	1	0	1	11	69	80	3 to 7	None	0	0	9	4,300	150,000
	WASHINGTON.													
561	Ballard	5	2	7	4	46	50	1 to 8	5 to 10	0	0	3	2,400	155,320
562	Bellingham	1	2	3	8	86	94	All	None		0	11	4,000	*167,100
563	Everett	7	1	8	6	68	74	All	None	0	0	9	2,700	270,712
564	Seattle	15	9	24	30	371	401	All	5 to 8	2	1	50	17,166	1,909,061
565	Spokane	5	15	20	21	220	241	1 to 9	7 to 8	2	0	22	9,679	1,270,228
566	Tacoma	10	7	17	17	194	211	All	All	0	0	22	*8,800	1,104,216
567	Walla Walla	1	3	4	8	48	56	All	Elementary	0	0	5	2,240	344,400
	WEST VIRGINIA.													
568	Charleston	2	7	9	6	66	72	1 to 8	None	0	0	8	3,109	237,041
569	Huntington*	1	1	2	5	48	53	Elementary		0	0	4	2,115	212,000
570	Parkersburg	2	1	3	15	70	85	All	None	1	0	15	.....	420,000
571	Wheeling	7	4	11	3	141	144	Elementary	None	0	0	12	6,265	894,670

	WISCONSIN														
572	Appleton	5	1	6	7	74	81	Elementary	High school	7	0	9	3,000	416,413
573	Ashland	3	3	6	7	61	68	Elementary	Elementary	1	0	11	2,770	325,000
574	Beloit	1	0	1	3	72	75	Elementary	None	5	0	11	2,200	235,000
575	Chippewa Falls	1	1	2	0	30	30	All	All	0	0	8	1,407	96,000
576	Eau Claire	10	11	21	12	73	85	Elementary and first year in high school	Elementary and first year in high school	0	0	13	4,400	270,800
577	Fond du Lac	2	3	5	3	76	79	1 to 9	1 to 6 and 9 to 12	7	0	9	3,400	256,000
578	Greenbay	1	1	2	6	80	86	Elementary	None	0	0	13	4,000	215,000
579	Janesville	1	1	2	7	65	72	All	None	4	0	10	2,700	300,000
580	Kenosha	2	0	2	.....	.....	54	All	5 and above	2	0	5	1,980	240,000
581	La Crosse	1	2	3	10	115	125	All	None	0	0	16	5,644	302,800
582	Madison	3	2	5	8	80	88	1 to 9	1 to 8	3	0	11	3,000	450,000
583	Manitowoc	2	2	4	12	48	60	All	All	6	0	5	2,065	185,000
584	Marinette	2	2	4	6	68	74	1 to 7	6 and above	6	0	7	3,400	162,000
585	Merrill	3	0	3	13	37	50	All	All	2	0	7	2,000	141,700
586	Milwaukee	30	11	61	85	886	971	All	All	51	0	[a]86	45,394	3,814,325
587	Oshkosh	5	2	7	11	118	129	1 to 10	1 to 10	11	4	12	6,216	344,000
588	Racine	12	4	16	6	131	137	All	5 and above	9	0	10	5,710	552,000
589	Sheboygan	15	4	19	17	98	115	Kindergarten and elementary	4 to 6	7	0	[b]11	[c]4,000	325,000
590	Stevens Point	1	3	4	2	44	47	All	All	4	0	8	3,000	150,000
591	Superior	9	9	18	16	161	177	All	All	10	0	12	6,500	559,686
592	Watertown	1	1	2	4	26	30	1 to 10	None	0	0	4	[c]1,980	80,200
593	Wausau	3	3	6	8	61	69	All	6 and above	8	0	11	3,500	226,068
	WYOMING.													
594	Cheyenne	1	1	2	2	30	32	All	(d)	0	0	5	1,340	130,617

[c] Statistics of 1903–4.

[a] Including 32 barracks.

[b] Modeling, sewing, and weaving are taught, but grades not named.

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5.*

	City.	From State apportionment or taxes.	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.a
	1	2	3	4	5	6	7
	ALABAMA.						
1	Anniston*	$7,800	$5,700			$13,500	$13,500
2	Birmingham	18,500	37,500	$18,114	$13,569	87,689	101,310
3	Huntsville	4,400	5,450			9,850	9,850
4	Mobile					103,587	103,587
5	Montgomery	15,632	46,174		668	62,474	62,474
6	Selma	6,500	9,760		4,500	20,760	20,760
	ARIZONA.						
7	Tucson					27,377	28,264
	ARKANSAS.						
8	Fort Smith	22,342	25,516	7,932	34,896	90,686	90,686
9	Hot Springs	5,000	25,000	11,000		41,000	81,000
10	Little Rock*	19,818		62,667	745	83,230	90,517
11	Pine Bluff	4,286	34,660	960		39,906	42,568
	CALIFORNIA.						
12	Alameda	47,056	32,268	33,898	166	113,386	126,245
13	Berkeley	57,588	39,314	38,640		135,542	299,852
14	Eureka	21,994	10,045	13,201	20,500	65,830	68,299
15	Fresno	37,078	51,373	21,501	190	110,142	136,998
16	Los Angeles	349,725	196,668	251,770	136,300	934,353	1,068,118
17	Oakland	168,381	114,611	135,230	6,701	424,923	1,393,233
18	Pasadena	38,242	33,504	32,135		103,941	219,284
19	Riverside	b 40,134	15,498	(c)	1,774	57,406	70,744
20	Sacramento	60,081	90,855	33,207	18,951	203,094	222,047
21	San Diego	33,574	0	68,601	7,390	104,565	110,282
22	San Francisco	b 987,011	323,364	(c)	58,477	1,368,852	1,436,236
23	San Jose	59,545	35,607	33,207	1,472	129,831	133,191
24	Stockton	33,763	42,588	23,074	71	99,496	106,525
25	Vallejo	17,014	2,224	15,740		34,978	40,645
	COLORADO.						
26	Colorado Springs	85,917			101,655	187,572	203,821
27	Cripple Creek	26,152	179,183			205,335	237,535
28	Denver	56,151	840,642	216,288	10,275	1,123,356	1,279,404
29	Leadville	28,755	33,336	4,269	1	66,361	93,974
	Pueblo						
30	District No. 1	27,720	132,537		12,521	172,778	177,873
31	District No. 20	30,115	134,300			164,415	164,787
	CONNECTICUT.						
32	Ansonia	8,109	42,669			50,778	123,461
33	Bridgeport	40,172	256,249			296,421	296,421
34	Bristol	5,674	41,323		1,137	48,134	53,034
35	Danbury	10,512	60,854		875	72,241	74,304
36	Hartford	40,797	190,467	d 231,894		463,158	633,036
	Manchester:						
37	Town schools	2,905	11,801		545	15,251	15,251
38	Ninth district	3,067	25,720		960	30,367	30,367
39	Meriden	15,172	84,495		179	99,846	113,466
40	Middletown	5,413	17,925	d 12,000	7,349	42,730	89,935
41	Naugatuck e		f 28,792	d 12,271		41,063	44,863
42	New Britain	16,384	92,259		3,900	112,643	112,643
43	New Haven					426,700	459,981
44	New London	9,295	55,760		1,864	66,919	66,920
45	Norwalk	11,020	65,750		1,305	78,115	82,263
	Norwich						
46	Central district	3,582	25,970	d 13,106	2,774	45,432	46,036
47	West Chelsea district	2,567	5,726	d 8,000	259	16,402	17,472
48	Stamford	10,861	96,000		14,583	121,444	121,444
49	Torrington	11,122	33,866			44,988	44,988
50	Vernon g						
51	Wallingford (Central district)						
52	Waterbury	35,080	304,210		1,113	340,403	340,725
53	Willimantic h	7,238	f 27,175			32,413	36,000

* Statistics of 1903-4.
a Includes throughout table balances brought forward, receipts, loans, etc.
b From State and county.
c Included in column 2.
d From district taxes.
e Statistics for Union Center district.
f Includes State appropriation.
g Includes city of Rockville.
h Included in town of Windham.
i Includes receipts from "All other sources."

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5.*—Continued.

	City.	From State apportionment or taxes.	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	DELAWARE.						
54	Wilmington	$36,163	$199,479	$677	$2,984	$239,303	$252,851
	DISTRICT OF COLUMBIA.						
55	Washington	838,129	838,129			1,670,258	1,676,258
	FLORIDA.						
56	Jacksonville a*	8,531		83,044		91,575	99,541
57	Key West	1,799		7,157	392	9,348	11,830
58	Pensacola b*	7,745	c34,419		1,027	43,191	66,523
59	Tampa	6,760	c28,000		1,200	35,960	35,960
	GEORGIA.						
60	Athens	5,458	16,400		8 6	23,704	24,008
61	Atlanta	49,038	188,958			237,996	237,996
62	Augusta	30,000		c55,000	6,742	91,742	91,742
63	Brunswick*	10,240	9,500	2,000	000	22 340	31,100
64	Columbus	11,574	39,931		2,391	52,896	53,896
65	Macon d	40,467	c50,000		3,677	94,144	94,144
66	Savannah e	43,794		c101,000	2,768	147,562	147,562
	IDAHO.						
67	Boise	32,721	72,183			104,904	108,906
	ILLINOIS.						
68	Alton	3,181	49,502	6,750		59,433	59,433
	Aurora.						
69	East Side	3,452	66,292		8 8	70,602	70,602
70	West Side	982		c27,284	12,357	40,623	40,623
71	Belleville	2,799		55,295	374	58,468	78,392
72	Bloomington	4,547	115,919		3,703	124,169	273,239
73	Cairo	1,744	42,790	33		44,567	50,059
74	Champaign		f23,763			23,763	90,564
75	Chicago	338,551	8,848,100		561,451	9,748,108	12,404,199
76	Danville		f73,429	g3,408	2,033	78,870	111,688
77	Decatur	5,229	84,514		815	90,558	127,115
	Dixon:						
78	City proper	747		25,911	344	27,002	29,535
79	North Dixon	198		c11,952	252	12,397	10,610
80	East St. Louis	g3,989	214,305		5,639	223,933	456,423
81	Elgin					113,210	216,160
	Evanston:						
82	District No. 74 (North Evanston) h					10,676	12,756
83	District No. 75		f114,303		1,679	115,982	121,760
84	District No. 76 (South Evanston)	1,170	46,438		98	47,706	50,020
85	Freeport	2,005	f50,563		2,832	55,400	78,972
86	Galesburg	3,064	77,000		2,615	82,679	238,048
87	Jacksonville	2,120		67,528	784	70,432	70,432
88	Joliet		123,000		382	123,391	129,053
89	Kankakee	3,320	49,632	200	1,303	54,554	66,436
90	Kewanee*	1,676		47,190	1,247	50,113	54,656
91	Lasalle	2,223	21,935	4,184	110	28,452	29,769
92	Lincoln	1,849	31,665		112	33,626	33,819
93	Mattoon	2,716	24,179	9,300	970	37,264	50,764
94	Moline	3,194	99,720		1,909	104,823	194,723
95	Monmouth					45,000	45,000
96	Ottawa	1 899		c6,076	180	28,155	120,046
97	Pekin	1,572		38 147	223	39,942	55,466
98	Peoria	10,759	249,754		4,381	264,494	380,103
99	Quincy	7,700	76,541	10,986	16,482	117,709	128,044
100	Rockford	4,975	130,942		3,518	139,435	297,134
101	Rock Island	2,094	67,533		1,025	72,152	125,000

* Statistics of 1903–4.
a Statistics of Duval County.
b Statistics of Escambia County.
c From city and county.
d Statistics of Bibb County.
e Statistics of Chatham County.
f From school district.
g From State and county
h From biennial school report of Cook County, for 1903 and 1904.

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	From State apportionment or taxes.	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	ILLINOIS—continued.						
102	Springfield	$6,726	$178,373		$2,069	$187,168	$187,168
103	Streator	3,145	44,092		173	47,410	65,104
104	Waukegan	1,580	33,450		11,419	46,435	73,618
	INDIANA.						
105	Alexandria					30,145	46,059
106	Anderson*	19,917	87,478		6,316	113,711	147,744
107	Brazil	17,820		$13,581	1,838	33,248	54,760
108	Columbus	8,270	38,840		1,141	48,251	165,430
109	Elkhart	14,202	56,827		1,006	72,125	79,727
110	Elwood					43,279	44,108
111	Evansville					272,745	350,982
112	Fort Wayne	62,409	98,517		18,338	179,324	381,829
113	Hammond*	13,857	13,834	38,624	1,775	68,090	97,072
114	Huntington					53,535	67,943
115	Indianapolis	189,062	816,088	14,563	21,183	1,040,896	1,330,211
116	Jeffersonville	10,480	16,437	1,027	2,007	30,570	52,178
117	Kokomo	12,663	15,597	624	35,493	64,397	86,579
118	Lafayette	17,512	63,640	6,157	883	88,192	149,208
119	Logansport					47,000	65,000
120	Marion	27,379		73,935	4,450	105,764	141,915
121	Michigan City	19,847	21,027	11,827	913	53,614	111,920
122	Muncie	18,727	44,483	41,594		104,804	181,135
123	New Albany	30,771		56,038	9,122	95,931	174,469
124	Peru						
125	Richmond	14,931	79,941		2,080	96,952	134,287
126	South Bend	59,791	125,797	500	2,359	191,447	382,456
127	Terre Haute	54,203	4,592	161,756	10,025	231,176	313,253
128	Vincennes	12,703	9,104	23,580	5,663	50,450	109,967
129	Wabash	9,077	35,104	487	2,317	46,985	54,767
130	Washington						
	IOWA.						
131	Boone	3,352		41,745		45,097	59,591
132	Burlington	6,986	96,965		6,027	109,978	114,262
133	Cedar Rapids	9,421	141,240		391	151,052	163,309
134	Clinton	6,461		66,958	922	74,341	91,067
135	Council Bluffs	8,966		142,168		150,734	183,334
136	Davenport	15,164		179,079	13,809	208,052	262,311
	Des Moines.						
137	Capital Park	500	564	19,925	190	21,179	25,013
138	East Side	7,343	87,444		1,254	96,041	129,767
139	West Side	17,918	271,890			289,808	305,168
140	Dubuque	13,182		98,400	317	112,899	113,124
141	Fort Dodge	3,904	a 47,219		676	51,799	63,309
142	Fort Madison	2,783		17,800	246	[redacted]	20,957
143	Iowa City						
144	Keokuk	3,902		43,302	873	47,977	50,474
145	Marshalltown						
146	Muscatine	5,312	50,711		2,745	58,768	58,768
147	Oskaloosa	3,787		48,974		52,761	54,631
148	Ottumwa	5,025	80,175	6,732		91,932	92,042
149	Sioux City	12,437		200,097	15,341	227,875	227,875
	Waterloo						
150	East Side	4,234		49,910	31	54,175	67,272
151	West Side			33,621	69	33,690	37,088
	KANSAS.						
152	Atchison	3,474		32,973	1,507	37,954	52,127
153	Emporia	2,539	38,483		884	41,906	44,511
154	Fort Scott	7,789	22,412		1,725	31,926	31,926
155	Galena	2,336		16,209	21	18,566	22,091
156	Hutchinson	2,296	36,178		414	28,888	47,617
157	Iola	3,192	40,307			43,499	49,649
158	Kansas City	14,393		209,281	2,475	226,149	289,582
159	Lawrence	3,197	b 30,641		6,830	40,668	40,668
160	Leavenworth	5,490	b 43,763		2,892	51,685	84,982
161	Parsons	1,566	28,273	340		30,178	38,587
162	Pittsburg	5,000	34,000			39,000	60,000
163	Topeka	9,511	182,736		36,103	228,360	376,002
164	Wichita	7,663	600	91,674	1,908	101,655	108,262

* *Statistics of 1903–4.* a From district taxes. b From city and county.

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	From State apportionment or taxes	From city appropriations or taxes	From county and other taxes	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	KENTUCKY						
165	Bowling Green	$7,935	$19,476		$70	$18,481	$21,275
166	Covington	55,472	67,819		1,445	124,736	149,493
167	Frankfort	6,569	10,548		624	17,741	26,601
168	Henderson	9,288	20,761		2,134	32,181	39,381
169	Lexington [a]	31,148	46,569		1,162	78,879	102,630
170	Louisville	185,824	430,236		12,150	636,900	777,494
171	Newport						
172	Owensboro	13,249	25,982		2,489	41,720	61,855
173	Paducah [a]	15,428	30,170		462	46,060	50,895
	LOUISIANA.						
174	Baton Rouge [c]		7,500	35,570		13,070	13,070
175	New Orleans	105,014	422,281		38,747	566,042	599,127
176	Shreveport		4,000	33,750		37,750	37,750
	MAINE.						
177	Auburn	10,406	34,500		535	45,491	45,491
178	Augusta [b]	3,440	9,348	8,064		26,650	26,650
179	Bangor	16,195	64,000		574	80,769	80,769
180	Bath [a]	9,132	25,200		617	34,949	34,949
181	Biddeford	15,421	15,500		2,200	33,111	33,111
182	Lewiston	22,162	31,000		580	53,741	53,741
183	Portland [b]	41,943	136,956			178,899	178,899
184	Rockland	5,795	21,500		221	27,516	27,611
185	Waterville	8,265	14,500		15	23,780	29,311
	MARYLAND.						
186	Annapolis [c]					17,253	17,253
187	Baltimore	53,605	1,376,608			1,430,213	1,448,743
188	Cumberland [c]					25,091	25,091
189	Frederick [c]					17,884	17,884
190	Hagerstown [c]					30,447	30,447
	MASSACHUSETTS.						
191	Adams		41,773			41,773	41,773
192	Amesbury		26,880		300	27,000	27,000
193	Arlington [a]		50,488		1,051	51,409	65,340
194	Attleboro		66,117		2,200	68,363	69,200
195	Beverly		77,009	451	30,503	107,954	138,954
196	Boston					5,738,285	5,738,285
197	Brockton		165,000		2,070	167,070	169,353
198	Brookline		358,000			358,000	358,298
199	Cambridge		522,661		7,978	530,639	685,016
200	Chelsea		163,223		324	163,547	163,551
201	Chicopee		66,190			66,190	66,190
202	Clinton		48,000			48,000	48,000
203	Danvers		31,222	556	878	32,656	34,984
204	Everett		140,192		3,541	193,733	271,264
205	Fall River		366,238			366,238	366,238
206	Fitchburg		128,493		556	129,049	129,049
207	Framingham		49,600	1,210	538	51,348	51,348
208	Gardner		47,301		501	47,802	47,897
209	Gloucester		105,294		1,580	106,874	106,874
210	Greenfield		41,275		979	42,254	45,634
211	Haverhill		147,842		836	148,678	148,678
212	Holyoke		189,802	1,932	218	191,952	191,952
213	Hyde Park		56,700		262	56,962	57,309
214	Lawrence		216,146			216,146	216,146
215	Leominster [d]		54,000		808	54,808	54,854
216	Lowell		369,451		2,239	371,690	371,690
217	Lynn		210,000		46,160	256,160	256,160
218	Malden		173,400		1,837	175,237	176,674

[a] Statistics of 1903–4.
[c] For white schools only.
[b] From State school report, 1905.
[c] The city is a part of the county system and has no special appropriation. The statistics given represent the expenditures.
[d] From annual report of the school committee, 1905.

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	From State apportionment or taxes.	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	MASSACHUSETTS—continued.						
210	Marlboro		$55,800		$243	$56,043	$56,043
220	Medford		110,126		149	110,275	110,275
221	Melrose		85,020			85,020	85,020
222	Milford		38,000		285	38,285	38,285
223	Natick		41,500		1,009	42,509	42,509
224	New Bedford		340,521		4,622	345,143	348,153
225	Newburyport		39,769		2,638	42,407	42,407
226	Newton		229,681		3,461	233,142	233,142
227	North Adams		94,094	$930		95,024	95,024
228	Northampton		74,628		2,166	76,794	76,794
229	Peabody		45,200	1,042	702	46,944	46,944
230	Pittsfield		97,217			97,217	142,217
231	Plymouth		75,442		117	75,559	75,559
232	Quincy		111,000		286	111,286	111,286
233	Revere		67,500		1,140	68,640	68,829
234	Salem		132,530	1,894	1,763	136,187	136,187
235	Somerville		357,816			357,816	357,816
236	Southbridge		27,625			27,625	28,177
237	Springfield		302,340		7,249	309,789	309,789
238	Taunton		126,489		3,318	129,807	129,807
239	Wakefield		59,185		1,812	60,997	61,085
240	Waltham		127,452	32		127,484	131,371
241	Ware		33,000	493	245	33,738	34,372
242	Watertown		47,000		26	47,026	47,031
243	Webster		19,700		968	20,668	26,813
244	Westfield		58,625		7,937	66,562	67,890
245	Weymouth		53,500			52,500	61,836
246	Woburn		64,830		660	65,490	82,906
247	Worcester		625,475		4,491	629,966	656,836
	MICHIGAN.						
248	Adrian	$8,000	25,000		12,000	45,000	45,000
249	Alpena						
250	Ann Arbor	10,375	55,287		47,089	112,988	112,988
251	Battle Creek	16,300	119,289	711	1,494	137,794	164,266
252	Bay City	53,102	51,266		3,827	98,195	100,856
253	Calumet school district	24,429	106,731		4,484	135,644	184,780
254	Detroit	277,045	781 049		138,156	1,196,250	1,438,474
255	Escanaba	10,296	40,933	8,913	416	60,558	74,757
256	Flint	10 037	10,023	47,159	22,500	89,719	93,138
257	Grand Rapids	86,311	290,340		106,541	483,192	579,980
258	Holland	7,971	22,000		384	30,355	37,726
259	Iron Mountain	10,014	55,791	4 839	227	70,871	85,399
260	Ironwood	8,486	49,106		26,220	83,792	103,718
261	Ishpeming						
262	Jackson	18,055	65,276	801	3,002	87,264	100,854
263	Kalamazoo	21,482	101,175	2,616	3,446	128,721	271,459
264	Lansing	10 912	57,700	231	16,533	85,376	120,334
265	Manistee	14,921	37,281		1,097	53,299	57,242
266	Marquette	10,367	40,633		2,318	53,318	58,856
267	Menominee	13,355	31,126	8,548	665	53,694	71,750
268	Muskegon	22,743	68,037	5,673	3,078	100,131	121,603
269	Owosso	7,835	26,967		1,801	36,603	37,063
270	Pontiac	7,568	34,800	5,371	1,686	49,445	82,196
271	Port Huron	23,768	36,700	112	786	61,366	68,678
	Saginaw						
272	East Side	26,257	104,432		11,351	142,040	179,663
273	West Side	17 798	55,162	227	897	74,054	90,461
274	Sault Ste. Marie	12,549	42,601		55,450	59,950	
275	Traverse City	9,800	25,000		730	35,530	39,530
276	West Bay City[a]	10,749	24,040		171	35,557	70,757
	MINNESOTA.						
277	Brainerd	7,856	41,482	2,364	2,751	54,433	57,807
278	Duluth	40,408		355,961	4,432	400,801	521,311
279	Faribault	4,659	2,283	23,027	228	31,097	38,077
280	Mankato	5,057	25,016		103	31,076	44,930
281	Minneapolis	159,103	992,962		28,100	1,180,165	1,231,395
282	St Cloud	1,325	8,886	22,928	120	33,259	33,725
283	St Paul	110,920	473,886		209	585,015	916,234
284	*Stillwater*	8,486	37,570	3,881	43	49,980	71,272
285	*Winona*	9,569	57,297	7,390	2,661	76,917	76,917

[a] *Schools of West Bay City were consolidated with those of Bay City in April, 1905.*

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904-5*—Continued.

	City.	From State apportionment or taxes.	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	MISSISSIPPI.						
286	Jackson	$8,195	$13,460	$2,128	$311	$24,094	$30,340
287	Meridian	10,321	18,726		919	30,466	37,385
288	Natchez	9,555	6,831			16,386	22,094
289	Vicksburg*					34,800	34,800
	MISSOURI.						
290	Carthage					47,303	129,407
291	Hannibal	10,634		37,525	10,885	59,044	184,840
292	Jefferson City[a]					69,289	69,289
293	Joplin					88,426	93,774
294	Kansas City	108,636		856,190	92,806	1,057,632	1,602,954
295	Moberly[a]					31,193	31,193
296	St. Charles[a]					29,172	29,172
297	St Joseph	46,009	230,814	5,500	9,349	291,672	291,672
298	St. Louis	230,120	2,334,287	509,945	157,377	3,231,729	3,437,234
299	Sedalia	7,593		48,363		55,956	89,427
300	Springfield	10,038	58,298	12,303		80,639	99,327
301	Webb City					29,762	29,762
	MONTANA.						
302	Anaconda	6,795	34,019	13,963	19	54,796	55,761
303	Butte	31,709		246,722	25,189	303,619	365,244
304	Great Falls	8,634		80,904	51	89,589	93,615
305	Helena	9,381		88,748	377	98,506	104,936
	NEBRASKA.						
306	Beatrice	4,200	9,750	23,000		36,950	36,950
307	Hastings	5,910	13,690	750	15,000	35,350	87,537
308	Lincoln	18,480		124,177	64,489	207,146	207,146
309	Omaha	48,618	301,416		25,660	375,694	837,459
310	South Omaha	10,613	67,791		87,147	165,551	204,793
	NEW HAMPSHIRE.						
311	Berlin	9,255	8,424	1,103	7,644	26,426	26,426
	Concord:						
312	Union district	35,642	31,759		6,708	74,109	85,438
313	Penacook district No. 20	2,446	3,657		604	6,709	6,859
314	Dover	856	34,354	1,389	888	37,487	38,233
315	Keene (Union district)	941	32,765		1,382	35,088	38,314
316	Laconia		23,643		701	24,344	24,344
317	Manchester		140,779		3,670	144,449	144,449
318	Nashua	1,310	32,764	2,368	34,896	71,338	71,338
319	Portsmouth	1,826	46,439		3,827	52,092	145,539
320	Rochester		21,000	1,671	1,012	23,683	23,683
	NEW JERSEY.						
321	Atlantic City	78,745	24,265	[b] 26,204	3,000	132,214	227,178
322	Bayonne	[c] 64,049	98,596			162,645	234,302
323	Bloomfield	24,499	37,500		3,545	65,544	76,720
324	Bridgeton	13,756	18,444		843	33,043	38,025
325	Camden	4,800	207,125	97,730	3,307	312,962	513,427
326	East Orange	51,045	107,583		2,346	160,974	283,758
327	Elizabeth[d]	[c] 57,084	[b] 86,416		115	143,615	143,615
328	Harrison[d]	[c] 8,437	[b] 18,295		80	26,812	26,812
329	Hoboken	85,023	130,304	87	412	215,826	219,136
330	Jersey City	205,227	358,023		201,537	826,387	1,856,325
331	Kearney	19,443	34,052		879	54,379	54,402
332	Long Branch	28,077	51,550		3,727	83,354	85,886
333	Millville	13,298	19,567			32,865	33,290
334	Montclair	42,303	80,398		2,678	125,469	137,898
335	Morristown	12,952	27,000		2,047	41,999	60,011
336	Newark	451,254	706,919		5,194	1,165,267	1,398,089
337	New Brunswick	21,330	42,097		1,000	64,427	64,584
338	Orange	40,000	66,500			106,500	231,500
339	Passaic	47,804	85,346		6,032	139,182	163,942
340	Paterson	138,873	206,730		2,085	347,688	432,737
341	Perth Amboy	22,579	93,401			115,980	115,980
342	Phillipsburg	15,203	27,698		422	43,233	59,238

* Statistics of 1903–4.
[a] *From State school report, 1905.*
[b] *From School district.*
[c] From State and county.
[d] From State school report, 1904.

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5—Continued.*

	City.	From State apportionment or taxes	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	NEW JERSEY—continued.						
343	Plainfield	$24,946	$78,034		$2,801	$105,781	$235,850
344	Rahway	12,995	18,400		427	31,822	32,606
345	Town of Union	26,122	38,424	$3,342		67,888	70,415
346	Trenton	109,137	122,400		5,989	237,526	393,700
347	West Hoboken	29,614	30,000		8,634	68,248	68,516
	NEW YORK.						
348	Albany	38,474	162,842		631	201,947	326,040
349	Amsterdam	9,877	59,680		970	70,527	70,564
350	Auburn	15,832	90,074		3,189	109,095	118,147
351	Batavia	5,937	40,996		1,368	48,301	61,763
352	Binghamton	23,866	119,708		2,031	146,500	135,952
353	Buffalo	141,744	1,529,415		4,459	1,675,618	1,874,021
354	Cohoes	9,000	42,000		513	51,599	84,514
355	Corning District No. 9	5,282	23,327		32	28,641	28,980
356	District No. 13						
357	Cortland	3,925	21,060	45	1,464	26,454	30,208
358	Dunkirk	7,377	55,295		1,968	64,640	70,585
359	Elmira	19,041	105,513		1,923	126,477	131,330
360	Geneva	8,023	43,402		66	51,491	83,770
361	Glens Falls						
362	Gloversville	8,825	54,751	1,744	2,785	67,906	70,696
363	Hornellsville	11,704	40,236		278	52,218	58,681
364	Hudson	4,818	19,280		1,649	25,547	36,189
365	Ithaca	9,644	44,806		9,514	62,964	86,243
366	Jamestown	15,133	92,657	1,851	8,450	118,100	118,100
367	Johnstown	7,015	33,868		138	41,021	43,955
368	Kingston	13,998	73,672		11,793	99,421	100,424
369	Lansingburg	8,612	54,129		332	62,474	62,993
370	Little Falls	4,325	30,025		2,577	36,927	50,430
371	Lockport	10,948	59,569		3,054	73,569	159,219
372	Middletown	7,225	43,979		9,492	59,687	97,781
373	Mount Vernon	14,132	152,238		4,112	170,482	281,103
374	Newburgh	14,934	82,000		155	97,089	97,927
375	New Rochelle	12,042	122,434		733	135,209	168,633
376	New York	1,703,770	21,040,472			22,744,182	54,480,772
377	Niagara Falls	13,477	97,901		5,648	117,026	132,018
378	North Tonawanda	7,189	53,787	889	907	62,743	71,257
379	Ogdensburg	8,883	27,320		143	36,346	59,301
380	Olean school district	8,304	46,773		1,145	56,222	61,403
381	Oswego	10,995	45,009		768	56,763	57,394
	Peekskill						
382	District No. 7 (Drum Hill)	3,857	21,355		253	25,365	28,713
383	District No. 8 (Oakside)	2,338	12,828	228		15,395	13,694
384	Plattsburg	4,025	31,244		1,209	36,478	53,348
385	Port Jervis	6,803	31,934		1,313	39,580	41,902
386	Poughkeepsie	11,228	75,490		3,698	90,416	139,263
387	Rochester	73,022	689,675		14,617	777,314	1,190,170
388	Rome	8,248	37,250	835	1,472	47,803	48,799
389	Saratoga Springs	7,983	58,823		1,926	65,202	72,353
390	Schenectady	18,921	127,724		2,620	147,265	252,277
391	Syracuse	59,137	423,139		1,874	484,140	710,355
392	Troy	25,208	158,472		1,029	184,909	186,914
393	Utica	28,853	190,611		5,430	224,894	254,342
394	Watertown	14,000	84,539		1,494	100,862	173,886
395	Watervliet	895	38,059		100	38,748	50,237
396	White Plains	6,084	51,472		2,520	60,056	62,134
397	Yonkers	28,434	352,371		1,570	380,375	511,962
	NORTH CAROLINA.						
398	Asheville	[a] 11,000	22,823		1,469	35,292	38,035
399	Charlotte	12,187	18,540		710	31,437	31,939
400	Concord	4,400	7,600		112	12,125	13,925
401	Durham		18,000	14,000		32,000	34,000
402	Greensboro		15,267	7,727		22,994	22,994
403	Newbern					20,900	20,900
404	Raleigh [b]		17,481	13,062		30,543	30,543
405	Wilmington	1,000		[c] 23,500		24,500	24,500
406	Winston [*]	7,000	10,500			17,500	17,500

[*] *Statistics of 1903–4.*

[a] *From State and county.*

[b] *From biennial State school report for 1903 and 1904.*

[c] *From city and county.*

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5* —Continued.

	City.	From State apportionment or taxes	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	NORTH DAKOTA.						
407	Fargo	$21,500	[a] $61,079		$342	$83,430	$53,430
408	Grand Forks	15,645	44,028		426	60,099	119,022
	OHIO.						
409	Akron	22,201	235,929		7,128	265,258	410,252
410	Alliance	5,071	27,715		5,741	38,527	65,610
411	Ashtabula [c]	5,824	36,326	$146	4,510	46,806	73,997
412	Bellaire	5,926		27,315	1,715	34,956	79,109
413	Cambridge	4,500	31,804		779	37,083	37,053
414	Canton	9,113	60,686		2,970	72,738	164,564
415	Chillicothe [b]					62 738	62,738
416	Cincinnati	199,736	1,040,486		58,849	1,299,071	1,399,413
417	Cleveland	197,514	2,035,326	6,877	90,821	2,330,540	4,066,206
418	Columbus	65,003	632,614		9,479	713,096	1,676,117
419	Dayton	46,336	442,257		16,173	505,368	787,604
420	East Liverpool	9,636	66,054		262	75,952	138,545
421	Elyria	4,600	42,530		4,140	50,660	109,497
422	Findlay [b]					66,366	66,366
423	Fremont	2,197	12,472		793	15,464	28,729
424	Hamilton	18,361		94,001	1,282	113,644	171,152
425	Ironton [c]	7,370	33,022		153	40,545	53,181
426	Lancaster	5,305	41,826	419	4,315	52,065	137,887
427	Lima	14,365		88,222	5,234	107,822	185,376
428	Lorain	7,928	63,691	275	11,520	80,599	201,345
429	Mansfield	8,699	76,375		2,012	86,486	130,057
430	Marietta [b]					73,304	73,304
431	Marion	6,830	50,954	47	495	58,226	125,619
432	Massillon	7,283	44,982		385	52,650	101,350
433	Middletown [c]	5,308		37,585	425	43,113	82,798
434	Newark	9,561	62,321		891	72,662	121,627
435	Piqua	7,662	50,640		980	59,462	71,314
436	Portsmouth	10,513		59,246	7,208	76,967	140,616
437	Sandusky	10,601	45,243		257	56,101	101,594
438	Springfield	19,695	149,474		1,949	170,518	218,349
439	Steubenville	8,445	72,033	111		80,589	187,953
440	Tiffin [c]	4 873	32,000			36,872	36,872
441	Toledo	99,420	525,292		8,464	603,176	903,080
442	Warren	5,230	31,841	16,206	1,042	54,919	61,553
443	Wellston			27,075	9,685	36,760	91,684
444	Xenia	4,321	41,401		1,804	47,526	65,827
445	Youngstown	24,760	219,117		1,152	245,038	399,402
446	Zanesville [c]	11,752	75,606		2,612	89,970	124,950
	OKLAHOMA.						
447	Guthrie						
448	Oklahoma City	8,000	75,000		3,000	86,000	86,000
	OREGON.						
449	Astoria	4,098		37,996	105	42,089	49,618
450	Portland	37,110	194,622	196,714	3,423	431,869	540,335
	PENNSYLVANIA.						
451	Allegheny	99,410	551,688		9,663	660,761	1,165,312
452	Allentown	30,776		130,843	66,623	228,262	237,581
453	Altoona	31,800	112,042		2,212	146,054	276,890
454	Beaver Falls	7,787	38,935		1,048	47,770	54,198
455	Braddock	11,937	54,538		1,291	67,766	141,719
456	Bradford	13,101	57,502		979	71,642	76,591
457	Butler	11,201	49,733		613	61,547	62,796
458	Carbondale	11,022	35,939		653	47,684	85,363
459	Carlisle	7,350	22,819		292	30,431	38,893
460	Chambersburg	7,201	19,108		358	26,767	27,207
461	Chester	26,928	88,007		6,364	121,299	128,476
462	Columbia	9,578	24,300		350	34,228	67,469
463	Danville	6,375	15,150		719	22,244	22,596
464	Dubois	8,737	27,987			36,724	41,979
465	Dunmore [c]	11,039	42,206	891		54,136	54,198
466	Duquesne	9,751	42,607		754	53,112	61,641

[a] Statistics of 1903–4.
[b] From city and county.
[c] From State school report, 1904.
[d] From State school report, 1905.

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	From State apportionment or taxes.	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	PENNSYLVANIA—continued.						
467	Easton	$20,944	$110,493	$1,408	$516	$133,421	$231,275
468	Erie	44,251	160,557	.....	1,657	206,465	303,443
469	Harrisburg	39,063	215,118	.....	1,471	256,572	327,087
470	Hazleton	13,079	43,919	.....	1,553	58,551	74,586
471	Homestead	11,534	39,392	.....	11,165	62,091	90,499
472	Johnstown	29,661	136,529	.....	2,165	168,555	224,909
473	Lancaster	28,619	93,430	.....	2,008	124,057	226,891
474	Lebanon	14,311	52,528	.....	441	67,780	75,632
475	McKeesport	28,378	127,544	.....	5,382	161,304	330,404
476	Mahanoy City	10,907	25,830	.....	229	37,056	43,026
477	Meadville	9,289	37,141	.....	1,791	48,221	51,538
478	Mount Carmel	9,503	23,571	49	512	33,635	35,716
479	Nanticoke[a]	10,250	33,771	.....	39,300	83,321	83,321
480	Newcastle	22,609	129,881	.....	2,228	154,718	189,715
481	Norristown	15,503	70,615	.....	2,350	88,477	147,082
482	Oil City[a]	11,572	49,007	.....	17,077	77,656	77,656
483	Philadelphia	844,908	6,395,860	.....	.....	7,240,668	7,240,668
484	Phoenixville	7,158	23,386	.....	659	31,183	32,413
485	Pittsburg	237,696	1,505,456	.....	96,127	1,839,278	2,490,516
486	Pittston[a]	9,919	30,235	.....	15,199	55,353	55,353
487	Plymouth	10,846	19,027	.....	8,019	38,792	39,097
488	Pottstown	11,938	31,871	.....	3,086	46,895	61,075
489	Pottsville[a]	12,371	45,898	.....	19,222	77,479	77,479
490	Reading	30,282	204,042	.....	3,845	238,169	466,203
491	Scranton	85,240	387,462	.....	9,044	481,746	607,199
492	Shamokin	14,015	39,345	.....	14,713	68,073	185,286
493	Sharon	9,048	34,439	.....	1,540	45,027	81,405
494	Shenandoah	16,923	38,945	900	291	57,059	97,402
495	South Bethlehem	10,165	31,825	.....	9,612	51,602	54,704
496	Steelton	12,489	42,776	18	871	56,134	78,063
497	Sunbury	9,180	23,917	52	1,041	34,190	41,639
498	Titusville	7,866	32,174	.....	411	40,451	57,085
499	Warren	8,107	42,959	.....	2,824	53,890	66,741
500	Washington[a]	11 923	102,552	.....	.....	114,475	218,706
501	Westchester	7,484	32,698	.....	2,496	42,678	46,541
502	Wilkes-Barre	40,301	130,451	1,087	.....	181,439	195,558
503	Wilkinsburg	11 963	68,205	158	1,429	81,855	99,732
504	Williamsport	24 887	96,279	.....	2,014	123,180	135,336
505	York	30,888	119,906	.....	9,773	160,627	272,190
	RHODE ISLAND.						
506	Central Falls	7,034	34 872	.....	5,709	47,615	54,192
507	Cranston	5 217	49,432	.....	2 585	57,234	107,328
508	Cumberland	4 879	28,040	.....	1,500	34,479	57,142
509	East Providence	5,723	56,522	.....	.....	62,245	71,714
510	Lincoln	4 045	20,000	.....	2,650	26 695	47,119
511	Newport	6,960	85,384	.....	12 184	104,528	146,016
512	Pawtucket	11 296	153,500	.....	6 053	171,749	185,181
513	Providence	32,704	739,159	32,814	15 810	820,487	1,087,048
514	Warwick	5 000	55,000	.....	3 800	63,800	65,509
515	Woonsocket	9,943	74,205	.....	1 038	86,086	116,915
	SOUTH CAROLINA.						
516	Charleston	.....	18 395	48,748	6,256	73,309	95,483
517	Columbia	10,281	11,624	11 913	5,296	39 114	47,326
518	Greenville	.....	.....	.....	.....	.....	.....
519	Spartanburg	6,044	10,437	.....	2,637	19 118	21,406
	SOUTH DAKOTA.						
520	Sioux Falls	9,263	55,963	.....	326	65 552	68,297
	TENNESSEE.						
521	Chattanooga	.....	55 000	.....	.....	55,000	55,000
522	Clarksville	.....	[b] 11 811	.....	7 053	19 764	27,595
523	Jackson	6 800	9,682	17,511	5 200	39 173	41,105
524	Knoxville	5 000	13 963	40 379	.....	59,242	59,245
525	Memphis	[c] 118,385	88 500	.....	12,432	219 317	218,209
526	Nashville	[c] 153,345	61,726	.....	60	215,131	215,131

[a] *From State school report, 1905.* [b] From State, county, and city. [c] From State and county.

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	From State apportionment or taxes.	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	TEXAS.						
527	Austin	$22,630	$36,242	$2,178	$10,937	$58,187	$71,145
528	Beaumont	15,115	21,937	2,060	188	39,300	40,358
529	Cleburne	11,160	17,489	205	689	29,543	29,543
530	Corsicana	9,646	20,311	512	299	30,758	31,442
531	Dallas	51,360	100,378	722	1,546	154,006	154,006
532	Denison	15,325	22,946	237	912	39,420	43,033
533	El Paso	18,650	56,134	2,270	30,000	107,053	162,995
534	Fort Worth	30,786	52,463	....	3,142	86,391	118,726
535	Gainesville	7,305	15,723	830	857	25,155	29,995
536	Galveston	27,315	47,008	4,867	1,312	81,002	101,664
537	Houston	55,305	90,000	188	453	145,946	163,955
538	Laredo	11,097	... ...	392	... ...	11,489	13,739
539	Marshall	13,475	4,195	471	187	18,328	39,310
540	Palestine	12,426	9,628	622	1,071	23,747	24,323
541	Paris	13,490	16,939	264	1,200	31,893	36,007
542	San Antonio	59,324	101,469	605	39,836	201,234	262,943
543	Sherman	11,000	28,000	.. ..	1,129	40,129	40,129
544	Tyler[a]	8,905	15,846	71	544	25,366	27,991
545	Waco	20,270	34,500	548	677	55,995	129,454
	UTAH.						
546	Ogden	27,891	66,575	15,485	4,618	114,569	117,003
547	Salt Lake City	77,674	304,474	67,805	35,242	485,195	502,345
	VERMONT.						
548	Barre	2,413	39,898	.... ..	1,355	43,666	61,086
549	Burlington	3,503	55,000	... ..	6,260	64,763	65,880
550	Rutland	4,354	40,943	....	898	46,195	48,224
	VIRGINIA.						
551	Alexandria	7,427	13,800	.. ....	... ..	21,227	21,228
552	Danville	7,664	17,000	.. ..	324	24,988	25,115
553	Lynchburg	10,431	36,700	... .	2,155	49,286	49,694
554	Manchester	.. ...	..	.. ..	....	.. ..	.....
555	Newport News	6,418	31,936	.. ..	354	38,728	40,060
556	Norfolk	18,778	74,575	.. .. ..	.... .	93,353	94,266
557	Petersburg	11,712	12,543	.. ..	440	24,695	24,695
558	Portsmouth	8,081	16,193	.. ..	.. ....	24,274	24,335
559	Richmond	38,338	177,483	.... .	3,786	219,607	223,367
560	Roanoke	10,104	36,508	.. ..	993	47,605	54,374
	WASHINGTON.						
561	Ballard	29,548	24,077	.. ..	775	55,000	55,000
562	Bellingham	51,069	....	64,216	812	116,097	121,368
563	Everett	41,626	.. ..	73,646	9,347	124,619	150,339
564	Seattle	231,519	381,245	6,072	4,763	623,599	1,031,500
565	Spokane	115,154	.. ..	195,833	5,089	316,076	454,425
566	Tacoma	135,337	[b] 175,631	.. ..	6,602	317,570	354,125
567	Walla Walla	31,513	21,722	2,982	79	56,296	61,007
	WEST VIRGINIA.						
568	Charleston	6,389	53,817	..	13,145	73,351	81,359
569	Huntington[a]	5,085	18,770	... ..	... .	23,855	51,072
570	Parkersburg	7,563	70,127	5,484	1,201	84,405	116,221
571	Wheeling	22,308	117,597	..	2,036	142,001	154,069
	WISCONSIN.						
572	Appleton	10,057	37,000	8,877	18,608	74,542	230,105
573	Ashland	9,620	73,133	8,049	2,000	93,402	116,419
574	Beloit	9,153	44,679	8,496	1,306	63,634	83,320
575	Chippewa Falls	6,823	24,723	7,300	1,205	40,051	52,399
576	Eau Claire	12,678	71,498	13,428	4,809	102,413	107,230
577	Fond du Lac	12,382	50,000	9,235	1,128	72,745	112,835
578	Greenbay	15,599	35,436	12,636	531	64,202	95,942
579	Janesville	7,911	35,010	8,103	19,900	70,974	71,027
580	Kenosha	38,030	22,450	5,800	2,497	68,827	116,580
581	La Crosse	19 663	69,617	18,503	1,576	109,359	154,732
582	Madison	11,180	50,000	10,427	4,505	76,112	106,841

[a] *Statistics of 1903–4.*
[b] *From city and county.*
[a] From biennial State school report for 1903 and 1904.

TABLE 8.—*Statistics of receipts of public schools of cities of over 8,000 inhabitants, 1904–5*—Continued.

	City.	From State apportionment or taxes.	From city appropriations or taxes.	From county and other taxes.	From all other sources.	Total.	Amount available for use during the year.
	1	2	3	4	5	6	7
	WISCONSIN—continued.						
583	Manitowoc	$8,548	$36,548	$8,360	$1,857	$55,313	$72,722
584	Marinette	15,045	32,000	11,570	94	58,715	60,765
585	Merrill	6,762	15,000	7,600	606	29,368	32,683
586	Milwaukee	207,668	593,000	191,946	12,646	1,005,260	1,384,365
587	Oshkosh	18,885	88,940	.....	1,298	109,123	128,175
588	Racine	22,729	43,879	55,000	4,883	126,501	150,368
589	Sheboygan	19,048	54,654	15,928	678	90,308	148,427
590	Stevens Point	8,350	[a] 34,344	.....	227	42,921	68,632
591	Superior	15,299	174,313	15,298	2,661	207,571	234,658
592	Watertown	7,405	5,368	6,621	848	20,242	38,662
593	Wausau	10,825	35,000	10,601	1,430	57,256	84,255
	WYOMING.						
594	Cheyenne	6,282	25,981	7,683	400	40,355	41,290

[a] From city and county.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5.*

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	ALABAMA.					
1	Anniston *	$1,175	$9,287	$1,415	.....	$11,877
2	Birmingham	1,642	65,362	11,669	.....	78,673
3	Huntsville	.....	8,810	1,040	.....	9,850
4	Mobile	49,000	51,307	3,280	.....	103,587
5	Montgomery	.....	52,323	10,151	.....	62,474
6	Selma	.....	14,500	1,500	.....	16,000
	ARIZONA.					
7	Tucson	.....	20,070	6,385	.....	26,455
	ARKANSAS.					
8	Fort Smith	40,659	36,560	13,153	.....	90,372
9	Hot Springs	48,000	* 23,000	7,800	.....	78,800
10	Little Rock *	7,526	50,448	16,561	$212	74,747
11	Pine Bluff	10,221	4,261	1,500	.....	15,982
	CALIFORNIA.					
12	Alameda	1,530	83,603	19,662	1,018	105,813
13	Berkeley	.....	104,987	28,832	.....	133,819
14	Eureka	19,466	32,115	10,105	.....	61,686
15	Fresno	7,000	80,557	28,678	.....	116,235
16	Los Angeles	81,591	653,113	166,973	1,800	903,477
17	Oakland	251,928	296,860	65,271	5,993	620,052
18	Pasadena	72,866	77,783	20,929	.....	171,578
19	Riverside	.....	35,084	15,949	.....	51,033
20	Sacramento	11,725	125,352	38,186	5,961	181,224
21	San Diego	8,024	68,575	23,761	.....	100,360
22	San Francisco	47,084	1,080,147	277,985	(a)	1,405,216
23	San Jose	1,570	95,772	31,143	1,075	129,560
24	Stockton	4,046	70,949	27,533	.....	102,528
25	Vallejo	144	25,796	7,698	[b] 400	33,638
	COLORADO.					
26	Colorado Springs	9,574	110,804	45,140	.....	165,518
27	Cripple Creek	7,000	95,022	46,150	.....	148,172
28	Denver	254,286	649,826	238,240	3,352	1,145,704
29	Leadville	103	34,059	15,578	.....	49,740
	Pueblo:					
30	District No. 1	3,107	69,452	98,412	.....	170,971
31	District No. 20	15,240	99,080	29,788	.....	144,108
	CONNECTICUT.					
32	Ansonia	44,403	40,435	10,115	248	95,201
33	Bridgeport	28,221	164,111	66,225	1,179	259,736
34	Bristol	800	29,430	10,824	.....	41,054
35	Danbury	8,000	41,357	22,324	561	72,242
36	Hartford	.....	273,917	220,647	11,000	505,564
	Manchester:					
37	Town schools	.....	11,191	3,132	923	15,246
38	Ninth district	.....	21,319	9,048	.....	30,367
39	Meriden	13,619	73,293	26,203	350	113,465
40	Middletown	43,245	21,596	11,216	.....	76,057
41	Naugatuck	4,681	24,357	11,275	150	40,463
42	New Britain	1,741	68,429	40,075	2,387	112,632
43	New Haven	1,500	318,791	103,833	5,621	429,745
44	New London	.....	45,783	8,737	1,088	55,608
45	Norwalk	7,446	48,362	11,605	1,085	68,498
	Norwich:					
46	Central district	.....	23,530	14,092	.....	37,622
47	West Chelsea district	.....	10,876	5,080	.....	15,956
48	Stamford	.....	73,461	[c] 30,420	897	104,778
49	Torrington	40,318	29,569	7,740	(a)	77,617
50	Vernon [d]	.....	.....	.....	.....	.....
51	Wallingford (Central district)	.....	.....	.....	.....	.....
52	Waterbury	49,000	145,444	93,747	3,306	291,497
53	Willimantic [e]	.....	23,289	11,268	.....	34,557

* Statistics of 1903–4.
[a] Not reported.
[b] Included in columns 3 and 4.
[c] Includes expenditures for permanent investments.
[d] Includes city of Rockville.
[e] Included in the town of Windham.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	DELAWARE.					
54	Wilmington	.....	$150,440	$85,667	$1,192	$237,299
	DISTRICT OF COLUMBIA.					
55	Washington	$289,503	1,101.552	276,711	8,493	1,676,259
	FLORIDA.					
56	Jacksonville [a*]	2,547	71,925	11,041	.....	85,513
57	Key West	10,571	10,995	1,669	.....	23,235
58	Pensacola [b*]	5,264	34,073	4,099	.....	43,436
59	Tampa	6,700	25,000	1,000	.....	32,700
	GEORGIA.					
60	Athens	150	21,346	2,512	(c)	24,008
61	Atlanta	30,054	190,477	17,465	(c)	237,996
62	Augusta	10,092	60,189	17,629	.....	87,910
63	Brunswick *	15,069	10,182	2,156	.....	27,407
64	Columbus	7,378	42,719	3,799	(c)	53,896
65	Macon [d]	6,678	74,262	9,207	.....	90,147
66	Savannah [e]	6,617	110,426	12,000	.....	129,043
	IDAHO.					
67	Boise	14,743	41,676	24,521	.....	80,940
	ILLINOIS.					
68	Alton	5,703	34,106	8,935	.....	48,744
	Aurora:					
69	East Side	5,452	44,878	18,272	.....	68,602
70	West Side	23,658	21,150	6,419	.....	51,227
71	Belleville	2,736	35,983	10,789	.....	49,508
72	Bloomington	74,785	69,099	35,828	.....	179,712
73	Cairo	3,111	32,131	11,169	.....	46,411
74	Champaign	3,577	25,788	8,282	.....	37,647
75	Chicago	2,181,601	5,431,531	1,990,213	132,585	9,735,930
76	Danville	12,318	41,038	20,759	.....	74,115
77	Decatur	16,457	56,901	27,474	.....	100,832
	Dixon:					
78	City proper	1,090	14,160	6,393	.....	21,643
79	North Dixon	427	8,228	4,152	.....	12,807
80	East St. Louis	93,714	102,692	[f] 172,380	448	369,234
81	Elgin	14,649	71,917	31,836	.....	118,402
	Evanston:					
82	District No. 74 (North Evanston) [g]	25	6,102	3,472	.....	9,599
83	District No. 75	16,865	50,786	18,581	.....	86,232
84	District No. 76 (South Evanston)	1,263	25,556	12,450	.....	39,269
85	Freeport	15,047	34,372	21,369	.....	70,788
86	Galesburg	85,271	51,627	25,311	.....	162,209
87	Jacksonville	4,000	45,000	21,423	.....	70,423
88	Joliet	14,573	65,909	39,373	562	120,417
89	Kankakee	20,906	26,065	13,965	.....	60,936
90	Kewanee *	7,683	26,609	14,624	.....	48,916
91	Lasalle	3,369	18,964	6,336	.....	28,669
92	Lincoln	6,209	19,938	6,743	.....	32,890
93	Mattoon	.....	26,716	7,537	.....	34,253
94	Moline	34,550	63,615	25,151	.....	123,316
95	Monmouth	27,182	24,791	12,244	.....	64,217
96	Ottawa	28,712	26,881	9,385	.....	64,978
97	Pekin	6,446	22,014	8,104	.....	36,564
98	Peoria	28,112	169,185	84,149	325	281,771
99	Quincy	30,665	69,448	23,543	.....	123,656
100	Rockford	39,814	88,162	35,442	.....	163,418
101	Rock Island	8,236	55,641	25,325	.....	89,202
102	Springfield	53,743	102,332	28,685	.....	184,760
103	Streator	.....	30,558	18,682	.....	49,240
104	Waukegan	15,721	32,858	12,839	.....	61,418

* Statistics of 1903-4.
[a] Statistics of Duval County.
[b] *Statistics of Escambia County.*
[c] *Not reported.*
[d] Statistics of Bibb County.
[e] Statistics of Chatham County.
[f] Includes $50,625 transferred to sinking fund.
[g] From biennial school report of Cook County for 1903 and 1904.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	INDIANA.					
105	Alexandria	$2,534	$17,817	$8,011	.....	$28,362
106	Anderson	6,259	58,875	29,472	.....	94,606
107	Brazil	.....	19,543	14,321	.....	33,864
108	Columbus	90,572	25,038	16,157	.....	131,767
109	Elkhart	18,000	44,032	8,783	.....	70,815
110	Elwood	2,500	30,976	9,242	.....	42,718
111	Evansville	55,843	156,015	60,887	.....	272,745
112	Fort Wayne	23,819	110,221	37,352	.....	171,392
113	Hammond*	.....	35,410	22,681	.....	58,091
114	Huntington	3,949	34,578	18,530	.....	57,057
115	Indianapolis	325,921	561,876	275,102	$1,855	1,164,754
116	Jeffersonville	597	27,399	8,138	.....	36,134
117	Kokomo	1,400	33,896	21,406	.....	56,702
118	Lafayette	30,000	53,018	23,970	.....	106,988
119	Logansport	10,000	37,000	13,000	.....	60,000
120	Marion	16,000	64,874	19,434	.....	100,308
121	Michigan City	7,500	32,830	26,993	.....	67,323
122	Muncie	25,917	55,489	28,032	.....	109,438
123	New Albany	48,706	42,214	18,891	.....	109,811
124	Peru*	.....	24,200	9,700	.....	33,900
125	Richmond	13,000	57,888	20,247	.....	91,135
126	South Bend	148,530	91,713	44,270	215	284,728
127	Terre Haute	19,225	142,807	46,675	249	208,956
128	Vincennes	6,250	26,243	21,863	.....	54,356
129	Wabash	2,500	30,568	12,000	.....	45,068
130	Washington	.....	.....	.....	.....	.....
	IOWA.					
131	Boone	653	29,573	10,922	.....	41,148
132	Burlington	.....	68,418	21,987	.....	90,405
133	Cedar Rapids	37,788	82,584	39,067	160	159,599
134	Clinton	.....	53,718	33,633	.....	87,351
135	Council Bluffs	25,000	79,553	37,198	.....	141,751
136	Davenport	77,913	122,445	48,656	.....	249,014
	Des Moines:					
137	Capital Park	6,613	11,500	4,422	.....	22,535
138	East Side	3,719	56,599	27,668	.....	87,986
139	West Side	15,935	171,290	83,194	500	270,919
140	Dubuque	6,543	77,467	26,802	.....	110,812
141	Fort Dodge	4,572	29,243	10,683	.....	44,498
142	Fort Madison	.....	14,286	7,969	.....	22,255
143	Iowa City	.....	24,797	.....	.....	.....
144	Keokuk	1,192	37,500	9,158	.....	47,850
145	Marshalltown	.....	.....	.....	.....	.....
146	Muscatine	.....	38,963	20,828	.....	59,791
147	Oskaloosa	.....	42,746	13,612	.....	56,358
148	Ottumwa	3,500	53,763	30,737	.....	88,000
149	Sioux City	43,805	90,794	56,709	(a)	191,308
	Waterloo:					
150	East Side	19,941	30,430	13,201	.....	63,572
151	West Side	6,051	18,094	8,801	.....	32,946
	KANSAS.					
152	Atchison	1,182	21,756	10,017	.....	32,955
153	Emporia	335	28,238	11,054	.....	39,627
154	Fort Scott	4,236	22,773	3,404	.....	30,413
155	Galena	.....	10,243	3,449	.....	13,692
156	Hutchinson	396	20,980	13,073	.....	34,449
157	Iola	15,000	28,003	22,979	.....	65,982
158	Kansas City	50,034	126,163	50,482	.....	226,679
159	Lawrence	4,175	27,868	11,705	.....	43,748
160	Leavenworth	13,364	34,590	*17,657	.....	65,611
161	Parsons	130	20,161	9,170	.....	29,461
162	Pittsburg	25,000	28,000	16,000	.....	69,000
163	Topeka	110,876	114,843	49,813	.....	275,532
164	Wichita	763	66,969	34,305	.....	102,037

* Statistics of 1903–4.

a Not reported.

TABLE 9.—*Statistics of expenditures of public schools of cities of 4,000 inhabitants and upwards, 1904–5—Continued.*

No.	City.	Public schools: Salaries of teachers and other employees	Public schools: All other expenses	Other educational expenses	Evening schools	Total
	1	2	3	4	5	6
	KENTUCKY.					
166	Bowling Green	$2,700	$14,650	$612		$17,962
169	Covington	5,774	60,961	24,146	$330	113,485
165	Frankfort	773	19,417	2,427		22,529
168	Henderson		30,141	1,745		31,886
170	Lexington		54,743	21,667	1,925	88,335
167	Louisville	74,990	476,650	257,533	1,300	810,149
171	Newport					
172	Owensboro	2,965	29,457	6,513		38,615
173	Paducah	2,355	35,000	12,500		50,000
	LOUISIANA.					
174	Baton Rouge					13,050
175	New Orleans	1,301	425,000	93,672	1,000	536,273
176	Shreveport	3,000	30,000	4,750		37,750
	MAINE.					
177	Auburn		33,672	11,819		45,491
178	Augusta	7,577	9,242	10,365		27,024
179	Bangor		60,047	20,729		80,776
180	Bath	2,753	25,137	7,031		34,940
181	Biddeford		24,975	7,636	500	33,111
182	Lewiston		40,927	11,073	2,000	53,740
183	Portland					c178,530
184	Rockland	3,000	20,415	7,720		26,635
185	Waterville		18,712	10,599	[d]	29,311
	MARYLAND.					
186	Annapolis	1,214	9,923	6,474		17,263
187	Baltimore		1,091,372	323,394	16,170	1,430,816
188	Cumberland	2,744	18,471	3,876		25,091
189	Frederick	119	14,109	2,656		16,884
190	Hagerstown	3,200	22,358	4,889		30,447
	MASSACHUSETTS.					
191	Adams	1,000	28,876	11,043	854	41,773
192	Amesbury		18,645	8,838		27,483
193	Arlington	24,000	37,432	12,941		74,373
194	Attleboro	351	35,245	24,321	883	60,800
195	Beverly	39,995	53,727	23,551	1,579	118,762
196	Boston	2,472,157	2,611,685	552,796	101,597	5,738,235
197	Brockton		136,651	29,652	3,050	169,353
198	Brookline	140,693	126,000	59,463	1,655	327,811
199	Cambridge	77,312	370,204	152,152	11,507	f 591,175
200	Chelsea		116,682	44,772	1,912	163,366
201	Chicopee		39,372	25,058	1,860	66,290
202	Clinton		30,501	16,465	1,020	47,986
203	Danvers	515	24,701	13,295		38,511
204	Everett	76,974	103,660	53,262	1,549	235,445
205	Fall River		238,007	114,771	13,460	366,238
206	Fitchburg	12,354	85,106	29,387	2,200	129,049
207	Framingham		35,438	15,318	592	51,348
208	Gardner		27,660	19,285	862	47,807
209	Gloucester	7,798	65,851	29,610	125	103,374
210	Greenfield	896	27,621	13,804	366	42,687
211	Haverhill	3,520	109,751	32,494	2,077	147,842
212	Holyoke	9,949	133,359	44,337	4,307	191,952
213	Hyde Park		38,700	15,015	1,237	54,952
214	Lawrence	98,257	156,556	49,268	10,323	314,404
215	Leominster	3,645	33,526	16,525	1,158	54,854
216	Lowell	2,699	225,019	118,522	24,982	371,222
217	Lynn		182,010	70,739	3,411	256,160
218	Malden	330	136,497	44,416	3,637	184,880

* Statistics of 1903–4.
a For white schools only.
b For village district only; statistics from the report of the board of school directors for 1905.
c From State school report, 1905.
d Not reported.
e Includes city's proportion of general expenditures for the county.
f *Does not include $1,057 expended for vacation schools.*
g *From report of the school committee for 1905.*

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	MASSACHUSETTS—continued.					
219	Marlboro	.....	$41,191	$16,192	$289	$57,672
220	Medford	$3,302	79,327	26,646	1,000	110,275
221	Melrose	2,299	66,456	22,244	.....	91,999
222	Milford	.....	25,296	12,289	700	38,285
223	Natick	.....	28,918	13,576	.....	42,494
224	New Bedford	74,393	183,634	72,040	9,153	339,220
225	Newburyport	4,439	32,597	12,775	273	50,084
226	Newton	9,918	172,477	58,646	1,468	242,509
227	North Adams	6,799	61,388	25,037	1,800	95,024
228	Northampton	85,000	52,067	23,664	1,062	161,793
229	Peabody	93,659	31,532	11,210	646	137,047
230	Pittsfield	63,438	64,791	35,101	756	164,086
231	Plymouth	30,280	28,936	12,343	.....	71,559
232	Quincy	.....	85,829	25,428	.....	111,257
233	Revere	16,620	48,317	21,705	.....	86,642
234	Salem	758	100,824	32,607	1,997	136,187
235	Somerville	41,912	246,215	57,812	11,877	357,816
236	Southbridge	1,933	14,042	8,542	687	25,204
237	Springfield	.....	278,319	126,287	14,433	419,039
238	Taunton	6,221	87,925	33,945	[a] 1,716	129,807
239	Wakefield	1,532	41,268	10,579	.....	53,379
240	Waltham	709	71,197	37,510	1,964	111,371
241	Ware	2,013	20,613	11,637	.....	34,263
242	Watertown	2,396	37,009	7,619	[b]	47,024
243	Webster	748	15,135	8,269	601	24,753
244	Westfield	2,309	43,643	19,032	266	65,250
245	Weymouth	1,200	34,440	13,618	150	49,408
246	Woburn	3,372	44,308	15,304	628	63,612
247	Worcester	38,411	452,455	137,888	25,654	654,407
	MICHIGAN.					
248	Adrian	6,000	23,730	4,500	.....	34,230
249	Alpena [c]	.....	19,750	.....	.....	34,003
250	Ann Arbor	10,480	47,865	23,117	.....	81,462
251	Battle Creek	66,554	56,261	24,475	.....	147,290
252	Bay City	.....	65,440	30,655	265	96,360
253	Calumet school district	5,601	87,473	37,638	[b]	130,712
254	Detroit	24,712	797,747	256,616	6,256	1,085,331
255	Escanaba	1,345	27,551	11,419	.....	40,315
256	Flint	22,671	36,422	26,035	.....	85,128
257	Grand Rapids	10,702	285,414	110,413	500	407,029
258	Holland	2,202	18,130	6,708	.....	27,040
259	Iron Mountain	9,876	37,858	12,711	.....	60,445
260	Ironwood	.....	29,734	33,001	.....	62,735
261	Ishpeming [d]	1,151	41,516	24,393	.....	67,060
262	Jackson	18,800	58,169	28,269	.....	105,238
263	Kalamazoo	140,331	69,595	39,795	500	250,221
264	Lansing	14,014	47,358	21,379	.....	82,751
265	Manistee	.....	36,879	12,336	409	49,624
266	Marquette	12,296	31,066	14,188	.....	57,570
267	Menominee	6,879	31,762	10,865	.....	49,006
268	Muskegon	15,648	58,111	31,696	[a] 157	105,612
269	Owosso	.....	24,297	19,069	.....	43,366
270	Pontiac	2,284	22,563	18,500	.....	43,347
271	Port Huron	100	41,280	23,528	.....	64,908
	Saginaw:					
272	East Side	28,568	80,774	42,783	.....	152,125
273	West Side	23,865	42,258	19,338	.....	85,461
274	Sault Ste. Marie	12,000	34,549	20,000	.....	66,549
275	Traverse City	.....	28,000	4,700	.....	32,700
276	West Bay City	19,747	29,434	21,576	.....	70,757
	MINNESOTA.					
277	Brainerd	.....	31,391	[e] 20,467	.....	51,858
278	Duluth	76,110	196,825	137,276	.....	410,211
279	Faribault	1,857	19,431	7,367	.....	28,655
280	Mankato	2,140	22,599	14,720	.....	39,459
281	Minneapolis	121,085	766,126	243,584	.....	1,130,795

[a] For salaries only.
[b] Not reported.
[c] From State school report, 1904.
[d] From annual report of the school director, 1904.
[e] Includes $1,976 paid to sinking fund.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	MINNESOTA—continued.					
282	St. Cloud	$1,000	$22,304	$7,080	.....	$30,384
283	St. Paul	79,087	492,972	160,854	.....	732,913
284	Stillwater	.....	28,931	16,704	.....	45,635
285	Winona	.....	55,805	21,112	.....	76,917
	MISSISSIPPI.					
286	Jackson	.....	21,720	3,458	.....	25,178
287	Meridian	392	27,152	3,834	.....	31,378
288	Natchez	.....	16,688	1,722	.....	18,410
289	Vicksburg*	.....	23,484	.....	.....	.....
	MISSOURI.					
290	Carthage	54,822	27,125	6,186	.....	88,133
291	Hannibal	117,871	32,434	15,435	.....	165,740
292	Jefferson City[a]	33,569	13,589	4,980	.....	52,138
293	Joplin[b]	4,259	51,966	11,304	.....	67,529
294	Kansas City	158,781	625,332	330,782	.....	1,114,895
295	Moberly[a]	33,569	13,589	4,980	.....	52,138
296	St. Charles[a]	1,308	10,250	3,293	.....	14,851
297	St. Joseph	86,529	153,840	94,805	.....	335,174
298	St. Louis	777,701	1,418,640	644,086	$18,139	2,858,566
299	Sedalia	2,725	35,855	14,381	.....	52,961
300	Springfield	6,042	42,268	12,518	.....	61,428
301	Webb City	2,893	14,414	4,341	.....	21,648
	MONTANA.					
302	Anaconda	.....	.....	.....	.....	55,000
303	Butte	65,822	183,294	91,577	.....	340,693
304	Great Falls	6,297	52,139	25,053	.....	83,489
305	Helena	4,105	56,870	31,594	.....	92,569
	NEBRASKA.					
306	Beatrice	.....	23,500	9,000	.....	32,500
307	Hastings	55,260	18,930	10,240	.....	84,430
308	Lincoln	18,940	121,530	52,165	207	192,842
309	Omaha	66,043	314,373	329,282	3,759	713,457
310	South Omaha	133,117	93,717	32,036	.....	258,870
	NEW HAMPSHIRE.					
311	Berlin	3,904	14,969	7,553	.....	26,426
	Concord:					
312	Union district	10,803	45,693	26,878	.....	83,374
313	Penacook district No. 20	14,514	3,510	2,074	.....	20,098
314	Dover	.....	24,810	12,163	671	37,644
315	Keene (Union district)	.....	22,255	11,237	.....	33,492
316	Laconia	.....	17,148	7,196	.....	24,344
317	Manchester	1,460	99,619	41,841	1,527	144,447
318	Nashua	5,739	46,879	18,720	500	71,838
319	Portsmouth	93,446	37,459	14,634	.....	145,539
320	Rochester	.....	15,899	8,727	34	24,660
	NEW JERSEY.					
321	Atlantic City	91,050	67,393	56,217	.....	214,660
322	Bayonne	56,008	115,564	43,108	2,532	217,212
323	Bloomfield	.....	41,252	28,149	812	70,213
324	Bridgeton	.....	23,715	7,668	.....	31,383
325	Camden	159,076	205,669	103,894	1,844	470,483
326	East Orange	117,565	99,348	38,514	.....	255,427
327	Elizabeth[b]	8,297	101,897	29,600	.....	139,794
328	Harrison[b]	1,196	14,658	10,948	(c)	26,802
329	Hoboken	.....	163,329	53,242	1,754	218,325
330	Jersey City	357,270	521,134	133,258	12,806	1,024,468
331	Kearney	.....	36,700	17,702	.....	54,402
332	Long Branch	5,664	44,216	30,319	.....	80,199
333	Millville	.....	23,415	8,780	670	32,865
334	Montclair	8,799	88,245	32,933	1,070	131,047
335	Morristown	178	28,564	11,743	.....	40,485

* *Statistics of 1903–4.*
[a] *From State school report, 1905.*
[b] From State school report, 1904.
[c] Expenditure of $1,052 included in columns 3 and 4.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	NEW JERSEY—continued.					
336	Newark	$201,292	$822,041	$281,830	$56,080	$1,361,243
337	New Brunswick	.....	41,318	18,741	1,172	61,231
338	Orange	55,600	75,000	26,000	.....	156,600
339	Passaic	19,159	94,317	39,905	5,233	158,614
340	Paterson	39,215	251,015	86,972	7,928	385,130
341	Perth Amboy	57,885	42,447	15,372	.....	115,704
342	Phillipsburg	1,336	36,764	19,501	774	58,375
343	Plainfield	51,015	58,789	30,259	.....	140,063
344	Rahway	.....	20,547	10,965	.....	31,512
345	Town of Union	4,165	38,825	18,890	.....	61,880
346	Trenton	32,293	168,107	53,596	5,551	259,547
347	West Hoboken	689	43,692	17,659	.....	62,040
	NEW YORK.					
348	Albany	1,148	232,499	86,653	5,719	326,009
349	Amsterdam	15,180	42,822	2,527	.....	60,530
350	Auburn	6,256	74,424	22,859	.....	113,539
351	Batavia	10,933	24,555	9,303	.....	44,791
352	Binghamton	4,041	112,243	27,142	1,729	145,155
353	Buffalo	182,421	958,582	356,271	18,803	1,516,077
354	Cohoes	7,154	36,762	10,321	506	54,743
	Corning					
355	District No. 9	.....	18,292	8,000	.....	26,292
356	District No. 13	.....	.....	.....	.....	.....
357	Cortland	1,496	18,400	2,005	.....	21,901
358	Dunkirk	1,300	31,029	14,228	.....	46,557
359	Elmira	7,359	89,444	28,328	496	125,627
360	Geneva	15,884	31,004	8,732	.....	55,620
361	Glens Falls	.....	.....	.....	.....	.....
362	Gloversville	2,367	41,201	14,573	.....	58,141
363	Hornellsville	.....	33,179	14,476	.....	47,655
364	Hudson	2,271	18,122	3,980	.....	24,373
365	Ithaca	3,167	39,513	18,245	.....	60,925
366	Jamestown	11,274	66,845	35,831	.....	113,950
367	Johnstown	1,043	25,324	9,891	.....	36,258
368	Kingston	1,053	64,509	26,046	.....	91,608
369	Lansingburg	7,821	36,278	13,382	.....	57,481
370	Little Falls[a]	4,850	18,575	11,105	.....	34,530
371	Lockport	7,544	45,176	17,930	.....	70,650
372	Middletown	6,872	33,067	13,732	.....	54,071
373	Mount Vernon	34,841	94,473	46,608	379	176,301
374	Newburgh	6,484	63,510	25,944	.....	95,938
375	New Rochelle	2,054	83,478	45,594	764	131,890
376	New York	10,546,333	16,308,249	4,975,212	488,911	32,318,706
377	Niagara Falls	11,959	66,274	36,286	792	115,311
378	North Tonawanda	941	35,220	24,709	.....	60,870
379	Ogdensburg	2,114	27,480	12,508	.....	42,102
380	Olean school district	968	34,425	17,221	.....	52,614
381	Oswego	.....	42,206	14,849	.....	57,055
	Peekskill					
382	District No. 7 (Drum Hill)	3,963	15,197	6,502	.....	25,662
383	District No. 8 (Oakside)	893	11,560	3,859	.....	16,292
384	Plattsburg	1,820	25,119	8,136	.....	35,075
385	Port Jervis	368	25,639	10,491	.....	36,498
386	Poughkeepsie	17,442	56,500	40,458	480	114,880
387	Rochester	218,820	417,162	151,478	22,064	809,534
388	Rome	2,027	29,066	10,465	.....	41,558
389	Saratoga Springs	6,228	35,381	12,333	.....	53,942
390	Schenectady	98,951	96,546	19,603	1,373	216,473
391	Syracuse	8,424	351,369	109,802	3,940	473,554
392	Troy	.....	141,728	39,224	1,854	182,806
393	Utica	23,266	157,227	68,708	810	250,071
394	Watertown	31,908	56,794	31,424	300	120,326
395	Watervliet	2,850	27,260	8,230	.....	38,340
396	White Plains	.....	33,661	27,968	487	62,116
397	Yonkers	90,433	217,120	57,663	6,150	371,366
	NORTH CAROLINA.					
398	Asheville	3,609	24,934	4,834	.....	33,437
399	Charlotte	.....	24,068	1,303	(c)	[b] 29,178
400	Concord	800	10,300	750	.....	11,750

[a] *Statistics of 1903–4.* [c] Not reported. [b] Includes undistributed items.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	NORTH CAROLINA—continued.					
401	Durham		$29,000	$3,000		$32,000
402	Greensboro*	$4,000	16,000	3,000		23,000
403	Newbern	10,000	8,000	1,000		19,000
404	Raleigh[a]	383	23,209	7,637		31,229
405	Wilmington		21,320	3,000		24,320
406	Winston*		14,955	2,325		17,310
	NORTH DAKOTA.					
407	Fargo	18,901	37,363	16,572		72,836
408	Grand Forks	40,510	27,966	23,091		91,567
	OHIO.					
409	Akron	24,034	141,083	58,393	$797	224,507
410	Alliance	3,000	23,760	16,165		42,925
411	Ashtabula	15,046	24,268	9,549		48,863
412	Bellaire	13,496	17,659	11,891		43,046
413	Cambridge		20,052	8,364		28,416
414	Canton		96,968	37,564		134,532
415	Chillicothe[b]		36,500			58,674
416	Cincinnati	61,622	815,719	244,737	8,322	1,130,400
417	Cleveland	437,277	1,355,601	560,349	13,994	2,367,221
418	Columbus	82,293	388,662	221,334	546	692,835
419	Dayton	18,885	272,416	105,762	424	397,487
420	East Liverpool	16,776	37,906	25,205		79,887
421	Elyria	15,000	30,180	13,000		58,180
422	Findlay[b]		38,065			73,361
423	Fremont		20,008	8,364		28,372
424	Hamilton		63,201	[c]51,044		[c]114,245
425	Ironton*	1,873	25,740	7,206		34,819
426	Lancaster	30,406	23,773	13,592		76,771
427	Lima	42,912	52,837	36,979		132,728
428	Lorain	62,562	48,948	28,358		139,868
429	Mansfield	24,343	50,520	31,666		106,529
430	Marietta[b]		37,084			68,911
431	Marion	3,550	33,232	17,801		54,583
432	Massillon	4,500	32,352	17,002		53,854
433	Middletown	13,508	25,292	13,142		51,942
434	Newark	31,859	49,451	18,649		99,959
435	Piqua	1,675	30,065	16,000		47,740
436	Portsmouth	22,701	39,475	16,297		78,473
437	Sandusky		41,692	15,852		57,544
438	Springfield	11,987	106,582	30,970		149,539
439	Steubenville		41,046	17,142	450	58,638
440	Tiffin		19,000			40,000
441	Toledo	29,861	355,686	105,674		491,221
442	Warren		30,668	9,031		39,699
443	Wellston	28,304	15,082	7,008		50,394
444	Xenia		28,428	17,826	[d]	46,254
445	Youngstown	4,000	122,419	63,549		189,968
446	Zanesville*	11,500	56,140	23,339		90,979
	OKLAHOMA.					
447	Guthrie					
448	Oklahoma City	60,000	65,000	12,500		[c]137,500
	OREGON.					
449	Astoria		16,868	13,660		30,528
450	Portland	135,916	229,254	77,153	[d]	442,323
	PENNSYLVANIA.					
451	Allegheny	165,678	303,614	170,335	1,990	641,617
452	Allentown	30,659	78,268	31,845	1,200	141,972
453	Altoona	124,056	83,418	40,704		248,778
454	Beaver Falls		24,184	18,831		43,015
455	Braddock	48,428	38,901	58,523		145,852
456	Bradford	4,535	37,835	22,551		64,921

* Statistics of 1903–4.
[a] From biennial State school report for 1903 and 1904.
[b] *From State school report, 1904.*
[c] Interest not included.
[d] Not reported.
[e] Approximately.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	PENNSYLVANIA—continued.					
457	Butler	$4,094	$35,581	$18,787	.....	$58,462
458	Carbondale	18,858	36,808	16,465	(a)	72,131
459	Carlisle	1,985	17,257	7,709	.....	26,951
460	Chambersburg	1,742	16,886	7,609	.....	26,237
461	Chester	19,323	72,478	50,080	.....	142,881
462	Columbia	21,989	19,942	10,873	.....	52,774
463	Danville	.....	17,397	4,740	.....	22,137
464	Dubois	.....	18,506	9,085	.....	27,591
465	Dunmore[b]	4,671	28,518	12,986	.....	46,175
466	Duquesne	1,351	31,598	16,890	.....	49,839
467	Easton	51,760	66,406	64,963	.....	183,129
468	Erie	84,097	118,577	67,400	$1,118	271,252
469	Harrisburg	84,998	123,364	84,110	.....	292,472
470	Hazleton	14,337	34,137	14,145	.....	62,619
471	Homestead	4,046	36,854	20,291	.....	61,191
472	Johnstown	16,701	95,862	51,958	.....	164,521
473	Lancaster	87,870	60,700	38,221	2,419	188,210
474	Lebanon	4,725	32,698	37,455	.....	74,882
475	McKeesport	33,467	93,552	78,894	.....	205,913
476	Mahanoy City	757	21,470	8,120	120	30,467
477	Meadville	3,180	27,346	15,989	.....	46,515
478	Mount Carmel	504	18,814	9,399	125	28,842
479	Nanticoke[b]	45,471	23,858	14,346	.....	83,675
480	Newcastle	14,231	69,315	38,877	.....	122,523
481	Norristown	34,800	45,645	27,893	.....	108,338
482	Oil City[b]	7,652	39,335	29,252	.....	76,240
483	Philadelphia	779,992	3,047,350	1,004,960	55,000	4,887,302
484	Phoenixville	2,000	16,008	6,190	.....	25,098
485	Pittsburg	283,096	867,637	578,467	(a)	1,829,202
486	Pittston[b]	1,992	21,814	22,933	.....	46,437
487	Plymouth	249	18,706	9,653	439	29,057
488	Pottstown	.....	33,476	21,540	.....	55,016
489	Pottsville[b]	9,939	31,953	32,184	.....	74,026
490	Reading	149,338	165,371	80,852	4,151	399,712
491	Scranton	119,398	270,959	143,973	.....	534,330
492	Shamokin	7,144	36,104	19,529	160	63,037
493	Sharon	42,781	27,627	20,161	.....	90,569
494	Shenandoah	32,910	29,361	13,191	875	76,337
495	South Bethlehem	1,942	27,429	25,534	.....	54,905
496	Steelton	1,695	28,287	17,077	.....	46,959
497	Sunbury	.....	22,602	19,075	.....	41,677
498	Titusville	9,829	25,986	9,472	.....	[redacted]
499	Warren	.....	24,153	24,401	.....	48,554
500	Washington[b]	69,408	40,349	55,583	.....	165,340
501	Westchester	1,718	26,846	4,875	.....	33,439
502	Wilkesbarre	582	116,542	55,997	1,846	174,967
503	Wilkinsburg	21,098	45,748	16,801	.....	83,647
504	Williamsport	4,682	67,705	31,430	[redacted]	103,997
505	York	52,824	69,144	50,399	.....	172,367
	RHODE ISLAND.					
506	Central Falls	291	31,848	12,439	2,347	46,925
507	Cranston	50,000	39,868	17,460	.....	107,328
508	Cumberland	5,786	22,066	8,115	1,099	37,066
509	East Providence	11,524	32,008	14,402	276	58,210
510	Lincoln	1,680	17,051	7,105	.....	25,836
511	Newport	408	84,895	33,826	1,179	120,308
512	Pawtucket	9,617	116,210	51,481	5,127	182,335
513	Providence	163,863	509,539	[c]264,442	38,680	976,553
514	Warwick	.....	37,648	27,852	.....	65,500
515	Woonsocket	457	54,593	29,223	1,543	85,816
	SOUTH CAROLINA.					
516	Charleston	3,579	57,380	8,017	.....	68,976
517	Columbia	13,445	21,523	3,312	.....	38,280
518	Greenville	.....	.....	.....	.....	.....
519	Spartanburg	3,629	16,318	1,053	.....	21,000

a Not reported.
b From State school report, 1905.
c Not including interest.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	SOUTH DAKOTA.					
520	Sioux Falls	$20,520	$37,536	$5,429	.....	$63,485
	TENNESSEE.					
521	Chattanooga	.....	50,366	2,640	.....	53,006
522	Clarksville	6,000	16,026	1,824	.....	23,850
523	Jackson	6,122	22,378	6,111	.....	34,611
524	Knoxville	200	50,036	8,995	.....	59,231
525	Memphis	43,346	152,073	58,236	$1,852	255,507
526	Nashville	9,905	153,938	26,522	417	190,782
	TEXAS.					
527	Austin	[a] 12,292	45,995	6,293	.....	64,580
528	Beaumont	.....	29,743	5,508	.....	35,251
529	Cleburne	1,800	20,337	6,859	.....	28,996
530	Corsicana	2,000	22,200	4,075	.....	28,275
531	Dallas	22,000	122,866	35,593	625	181,084
532	Denison	7,114	26,053	.....	.....	33,167
533	El Paso	21,039	55,770	12,566	.....	89,375
534	Fort Worth	.....	69,030	37,276	.....	106,306
535	Gainesville*	635	21,265	4,494	.....	26,394
536	Galveston	.....	61,894	11,981	.....	73,875
537	Houston	25,647	134,472	3,836	.....	163,955
538	Laredo*	.....	11,534	1,900	.....	13,434
539	Marshal	18,515	13,546	6,482	.....	38,543
540	Palestine	500	19,048	700	.....	20,248
541	Paris	.....	25,171	[b] 8,534	.....	33,705
542	San Antonio	52,098	130,664	24,810	.....	207,572
543	Sherman	3,500	35,700	1,300	.....	40,500
544	Tyler [c]	7,824	17,044	2,949	.....	27,817
545	Waco	9,980	55,587	7,896	.....	73,453
	UTAH.					
546	Ogden	21,199	58,706	37,008	[d]	117,003
547	Salt Lake City	76,082	243,730	133,897	.....	453,709
	VERMONT.					
548	Barre	23,957	20,065	7,609	.....	51,631
549	Burlington	207	41,148	23,933	[d]	65,288
550	Rutland	.....	33,718	11,872	.....	45,590
	VIRGINIA.					
551	Alexandria	.....	17,163	3,950	.....	21,113
552	Danville	.....	21,453	3,559	.....	25,012
553	Lynchburg	2,712	40,208	6,042	.....	48,962
554	Manchester	.....	.....	.....	.....	.....
555	Newport News	2,936	25,275	6,589	.....	34,800
556	Norfolk	5,538	66,259	13,980	[d]	85,777
557	Petersburg	.....	19,208	5,487	.....	24,695
558	Portsmouth	.....	20,162	4,030	.....	24,192
559	Richmond	43,042	148,426	31,796	.....	223,264
560	Roanoke	3,626	36,881	7,534	.....	48,041
	WASHINGTON.					
561	Ballard	.....	34,549	[e] 20,179	.....	54,728
562	Bellingham	34,314	58,965	14,765	.....	108,044
563	Everett	65,395	36,286	35,375	.....	137,056
564	Seattle	209,862	345,622	267,671	[d]	823,155
565	Spokane	133,469	194,791	119,358	.....	447,618
566	Tacoma	70,574	169,103	87,463	.....	327,140
567	Walla Walla	28,703	13,796	14,942	.....	57,441

* Statistics of 1903–4.
[a] Includes expenditure for manual training in high school.
[b] Includes permanent investments.
[c] From biennial State school report for 1903 and 1904.
[d] Not reported.
[e] Does not include interest.

TABLE 9.—*Statistics of expenditures of public schools of cities of 8,000 inhabitants and upwards, 1904–5*—Continued.

	City.	Permanent investments and lasting improvements.	Teaching and supervision.	Current and incidental expenses.	Evening schools.	Total.
	1	2	3	4	5	6
	WEST VIRGINIA.					
568	Charleston	$5,617	$34,092	$16,837	.....	$56,546
569	Huntington*	35,726	20,988	8,365	.....	65,079
570	Parkersburg	54,000	44,083	13,880	.....	111,963
571	Wheeling	3,987	88,870	35,652	.....	128,509
	WISCONSIN.					
572	Appleton	74,298	44,617	56,641	.....	175,556
573	Ashland	50,500	43,579	13,458	.....	107,537
574	Beloit	15,000	38,023	18,406	.....	71,429
575	Chippewa Falls	2,800	21,707	7,300	.....	31,807
576	Eau Claire	9,061	57,573	27,055	.....	93,689
577	Fond du Lac	30,000	41,111	15,714	.....	86,825
578	Greenbay	30,584	47,096	13,305	.....	91,585
579	Janesville	13,312	34,431	11,656	.....	59,399
580	Kenosha	45,000	24,409	24,712	.....	94,181
581	La Crosse	1,182	77,311	29,149	.....	107,642
582	Madison	27,548	53,595	21,951	.....	103,094
583	Manitowoc	5,729	35,718	17,707	.....	59,154
584	Marinette	6,580	39,923	13,862	.....	60,365
585	Merrill	1,722	22,111	7,251	.....	31,084
586	Milwaukee	.....	750,578	173,151	.....	923,729
587	Oshkosh	17,443	73,725	21,763	$546	113,477
588	Racine	.....	95,257	30,041	.....	125,298
589	Sheboygan	6,885	63,387	12,336	.....	82,608
590	Stevens Point	16,361	22,751	10,339	.....	49,451
591	Superior	51,424	117,031	48,257	.....	216,712
592	Watertown	5,280	14,605	6,102	.....	25,987
593	Wausau	.....	43,200	13,983	.....	57,183
	WYOMING.					
594	Cheyenne	2,719	25,764	9,395	.....	37,878

* Statistics of 1903–4.

TABLE 10.—*Summary of statistics of evening schools in cities of 8,000 population and over, 1904–5.*

	Number of cities reporting evening schools.	Number of schools.	Teachers.			Pupils.				Average daily attendance.	Pupils of evening schools not attending day schools.
			Men.	Women.	Total.	Men and boys.	Women and girls.	Not reported as to sex.	Total.		
United States a	180	922	2,593	3,979	6,572	177,474	77,541	37,304	292,319	107,375	285,671
North Atlantic Division	125	702	2,049	3,243	5,292	138,016	65,429	30,490	234,530	a83,461	a229,599
South Atlantic Division	8	31	95	84	179	1,874	1,003	6,645	9,522	a3,232	a9,822
South Central Division	8	13	19	34	53	1,828	401		2,229	734	2,192
North Central Division	28	153	363	544	907	27,213	8,870	65	36,148	17,760	a35,282
Western Division	11	23	67	74	141	7,943	1,839	104	9,890	3,188	a9,076
North Atlantic Division:											
Maine	5	6	17	17	34	617	195	..	812	372	812
New Hampshire	3	8	11	17	28	620	137	.	757	409	757
Vermont	1	2	2	0	2	92	17	.	109	...	.....
Massachusetts	46	306	564	1,312	1,776	34,239	18,087	2,176	54,501	24,800	50,196
Rhode Island	7	42	142	168	307	6,176	2,313	.	7,489	3,171	7,369
Connecticut	15	38	93	103	196	1,520	544	4,693	6,763	2,378	6,759
New York	19	118	1,001	851	1,852	79,884	38,475	140	118,499	33,015	118,222
New Jersey	14	93	136	305	441	12,038	4,706	910	17,714	6,961	17,373
Pennsylvania	15	124	83	573	656	4,364	954	23,508	27,886	11,419	27,886
South Atlantic Division:											
Delaware	1	2	0	11	11	..		196	195	74	.....
Maryland	1	17	69	24	93	.		6,450	6,450	1,825	6,480
District of Columbia	1	1	20	37	57	1,355	932	.	2,267	1,073	.....
Virginia	1	4	2	2	4	110	0	.	110	85	110
North Carolina	1	2	3	1	4	50	0	..	50	...	50
Georgia	3	3	1	9	10	379	71	.	450	169	450
South Central Division											
Kentucky	3	8	0	28	34	1,094	385		1,479	555	1,442
Tennessee	2	2	2	4	6	206	16	..	222	84	220
Louisiana	1	1	7	2	9	280	0		280	.	280
Texas	1	1	3	0	3	109	0	.	109	67	109
Arkansas	1	1	1	0	1	70	0		70	28	70
North Central Division											
Ohio	7	57	81	40	121	5,303	1,085		6,388	2,683	6,375
Indiana	3	6	21	2	23	708	246		1,044	411	1,044
Illinois	4	43	162	377	539	14,820	5,546		20,366	11,096	20,366
Michigan	7	24	45	37	82	1,631	626		2,257	1,051	2,143
Wisconsin	1	4	7	1	8	142	55		197	67	196
Iowa	3	3	5	6	11	163	112	65	340	245	340
Missouri	1	13	42	67	109	3,714	1,032		4,746	2,058	.....
Nebraska	2	3	0	14	14	642	168		810	237	810
Western Division											
Colorado	1	4	12	6	18	452	96	..	548	200	548
Utah	1	1	3	0	3	40	8	.	48	40	48
Washington	1	1	10	0	10	442	93	.	535	176	...
Oregon	1	3	4	5	9	282	58	.	340	181	.....
California	7	14	38	63	101	6,727	1,584	106	8,417	2,591	7,957

a Including estimates for cities not fully reported.

TABLE 11.—*Statistics of evening schools in cities of 8,000 population and over, 1904–5.*

City.	Number of schools.	Number of evenings schools were in session.	Teachers.			Pupils.			Average daily attendance.	Pupils of evening schools not attending day schools.
			Men.	Women.	Total.	Men.	Women.	Total.		
1	2	3	4	5	6	7	8	9	10	11
ARKANSAS.										
Little Rock*.	1	120	1	0	1	70	0	70	28	70
CALIFORNIA.										
Alameda.	1	100	1	1	2	.....	.. ..	108	25	. ...
Los Angeles	1	159	4	0	4	304	0	304	91	304
Oakland	3	192	5	5	10	906	144	1,050	253	1,050
Sacramento	1	186	4	3	7	303	132	435	114	435
San Francisco	6	209	20	54	74	5,091	1,204	6,295	2,021	5,589
San Jose	1	110	3	0	3	153	4	157	63	.....
Vallejo	1	157	1	0	1	00	10	70	■	70
COLORADO.										
Denver	4	84	12	6	18	452	96	548	200	548
CONNECTICUT.										
Ansonia	1	78	3	2	5	104	15	119	54	119
Bridgeport	4	75	3	3	6	...	...	322	98	322
Danbury	1	75	2	1	3	80	70	150	60	150
Hartford	4	75	14	54	68	.....	.....	2,581	630	2,581
Manchester, Town schools	1	75	2	3	5	. . .	...	144	58	140
Meriden	1	47	2	1	3	..	. ....	147	47	.....
Naugatuck	1	75	1	3	4	..	.	210	38	210
New Britain	3	75	6	14	20	435	120	555	309	555
New Haven	5	75	36	4	40	...	.	1,166	516	1,166
New London	1	75	4	3	7	80	67	147	65	147
Norwalk	2	77	2	4	6	156	89	245	69	245
Stamford	1	96	4	1	5	279	26	305	40	305
Torrington	1	17	0	1	1	.	..	*23	*11	*23
Wallingford	.	.	.	.	.	..	..	..	..	..
Waterbury	1	75	12	6	18	392	157	549	295	549
DELAWARE.										
Wilmington	3	62	0	11	11	.....	.. ...	195	74	. .....
DISTRICT OF COLUMBIA.										
Washington	9	61	■	57	57	1,335	932	2,267	1,073	. .. ...
GEORGIA.										
Athens	1	173	0	3	3	102	55	157	60	157
Atlanta	1	195	0	4	4	247	0	247	76	247
Columbus	1	84	1	2	3	30	16	46	32	46
ILLINOIS.										
Chicago	37	87	153	370	523	14,448	5,452	19,900	10,824	19,900
East St. Louis	2	119	2	0	2	102	23	125	38	125
Joliet	1	120	3	3	6	112	25	137	33	137
Peoria*	3	120	4	4	8	156	46	204	. ..	204
INDIANA.										
Indianapolis	3	53	15	0	15	548	178	726	347	.....
South Bend	1	44	3	0	3	164	32	196	40	196
Terre Haute	2	105	3	2	5	80	30	122	18	122
IOWA.										
Cedar Rapids	1	20	0	2	2	43	32	75	04	75
Des Moines, west side	1	70	1	2	3	.	.	65	50	.....
Sioux City	1	80	4	2	6	120	80	200	135	200
KENTUCKY.										
Covington	1	19	1	0	1	16	40	56	23	56
Lexington	1	120	1	5	6	110	12	122	51	85
Louisville	6	*107	4	23	27	968	333	1,301	.	1,301

*Statistics of 1903–4.

TABLE 11.—*Statistics of evening schools in cities of 8,000 population and over, 1904–5*—Continued.

City.	Number of schools.	Number of evenings schools were in session.	Teachers.			Pupils.			Average daily attendance.	Pupils of evening schools not attending day schools.
			Men.	Women.	Total.	Men and boys.	Women and girls.	Total.		
1	2	3	4	5	6	7	8	9	10	11
LOUISIANA.										
New Orleans	1	99	7	2	9	289	0	289	.....	289
MAINE.										
Augusta	...	...	...	...	...	...	...	...	.....	.....
Biddeford	1	62	2	4	6	161	38	199	103	199
Lewiston	2	79	8	5	13	155	54	209	112	209
Portland	1	64	2	8	10	207	103	310	.....	310
Waterville	1	85	2	0	2	56	0	56	32	56
MARYLAND.										
Baltimore	17	a 83	69	24	93	...	.....	6,450	1,815	6,450
MASSACHUSETTS.										
Adams	2	30	2	11	13	180	173	353	201	.....
Attleboro	4	35	2	14	16	...	...	408	206	408
Beverly	11	c 34	7	5	12	154	126	280	195	271
Boston	25	a 95	...	...	387	13,811	7,457	21,268	7,297	.....
Brockton	3	b 49	4	16	20	...	...	396	321	.....
Brookline	2	66	3	5	8	73	78	151	79	151
Cambridge	7	63	33	36	69	1,204	758	1,962	822	1,962
Chelsea	1	50	6	12	18	498	309	807	385	807
Chicopee	4	40	1	20	20	263	169	432	288	.....
Clinton	1	...	1	11	12	180	52	232	115	227
Everett	4	51	4	4	8	124	89	213	.....	213
Fall River	63	46	45	103	148	2 042	1,092	3,134	1,642	3,134
Fitchburg	5	40	5	34	30	331	108	439	195	.....
Framingham	1	36	4	3	7	82	33	115	51	115
Gardner	1	34	2	23	25	198	35	233	217	225
Gloucester	2	30	1	6	7	90	28	118	65	118
Greenfield	1	49	2	3	5	46	31	77	31	77
Haverhill	5	60	4	20	24	301	138	439	287	.....
Holyoke	6	c 40	9	54	63	821	480	1,301	691	.....
Hyde Park	1	86	3	6	9	...	...	298	145	298
Lawrence	53	73	35	49	84	1,132	824	1,956	1,155	1,956
Leominster	1	60	5	29	34	...	...	271	105	.....
Lowell	16	e 60	35	130	165	2,560	1,484	4,050	2,152	f 3,000
Lynn	4	40	0	28	37	1,107	449	1,556	405	.....
Malden	2	63	12	11	23	...	...	551	230	545
Marlboro	5	43	2	3	5	125	19	144	46	135
Medford	1	69	5	2	7	188	96	284	152	284
Milford	1	45	1	10	11	217	53	270	135	268
New Bedford	7	39	6	100	106	2,077	1,264	3,341	1,638	3,330
Newburyport	2	30	1	5	6	30	25	55	32	50
Newton	2	g 65	4	5	9	...	...	250	113	.....
North Adams	14	40	2	13	15	257	96	353	250	317
Northampton	3	60	2	9	11	73	41	114	100	114
Peabody	1	59	1	12	13	137	9	146	79	146
Pittsfield	1	43	4	4	8	206	46	352	108	.....
Salem	4	120	5	20	25	405	159	564	187	.....
Somerville	5	89	14	25	39	801	249	1,050	423	1,050
Southbridge	4	36	1	11	12	177	121	298	231	288
Springfield	7	83	24	54	78	1,505	849	2,354	987	.....
Taunton	9	h 38	12	13	25	408	128	530	330	.....
Waltham	3	100	8	7	15	248	140	388	159	377
Watertown	1	60	2	0	2	90	0	90	40	.....
Webster	2	50	4	7	11	139	103	242	177	242
Westfield	1	39	1	3	4	36	49	85	40	85
Woburn	1	38	2	8	10	210	60	270	77	268
Worcester	16	111	53	50	103	1,607	667	2,274	1,172	.....

a Average.
b Drawing schools, 38 nights.
c High and grammar schools, 75 nights.
d From annual report of the school committee for 1905.
e High school, 75 nights.
f Approximately
g Drawing school, 35 nights.
h Drawing school, 40 nights.

TABLE 11.—*Statistics of evening schools in cities of 8,000 population and over, 1904–5*—Continued.

City.	Number of schools.	Number of evenings schools were in session.	Teachers.			Pupils.			Average daily attendance.	Pupils of evening schools not attending day schools.
			Men.	Women.	Total.	Men and boys	Women and girls.	Total.		
1	2	3	4	5	6	7	8	9	10	11
MICHIGAN.										
Bay City	3	60	3	0	3	143	28	171	52	171
Calumet	1	16	2	1	3	15	23	38	32	38
Detroit	8	80	31	14	45	840	290	1,130	494	1,051
Grand Rapids	4	36	4	5	9	382	52	434	202	434
Kalamazoo	1	58	4	3	7	58	91	149		139
Manistee	6	48	1	12	13	150	125	275	175	250
Muskegon	1	65	0	2	2	43	17	60		60
MISSOURI.										
St. Louis	13	60	42	67	109	3,714	1,032	4,746	2,058	
NEBRASKA.										
Lincoln	1	80	0	2	2	96	16	112	16	112
Omaha	2	97	0	12	12	546	152	698	221	
NEW HAMPSHIRE.										
Dover	1	56	2	4	6	128	32	160	69	160
Manchester	4	55	8	11	19	372	105	477	258	477
Nashua	3	50	1	2	3	120	0	120	82	
NEW JERSEY.										
Bayonne	1	60	4	18	22	363	103	466	144	466
Bloomfield	1	64	5	1	6	174	37	211	42	189
Camden	5	54	3	10	13	477	169	646	141	646
Harrison [a]	1	64	2	8	10	222	134	356	178	
Hoboken	1	64	1	12	13	459	129	588	239	588
Jersey City	5	[b] 67	17	40	57	2,040	935	2,975	949	2,975
Millville	3	55	0	5	5	192	0	192	55	192
Montclair	1	102	2	2	4	79	44	123	45	120
Newark	14	[c] 77	72	118	190	5,434	2,282	7,716	3,509	[d] 7,400
New Brunswick	1	64	4	5	9	141	60	201	83	201
Passaic	2	135	1	18	19			910	252	910
Paterson	5	64	21	39	60	1,724	612	2,336	768	2,336
Phillipsburg	1	64	3	3	6	53	8	61	44	61
Trenton	27	80	1	26	27	740	193	933	512	933
NEW YORK.										
Albany	5	77	10	31	41	1,074	330	1,404	530	1,404
Batavia	1	24	1	12	13			140	50	140
Binghamton	1	110	5	1	6	339	90	429	126	429
Buffalo										
Cohoes	1	97	0	4	4	30	70	100	60	60
Elmira	1	36	2	6	8	170	50	220	120	220
Mount Vernon	1	42	1	3	4	142	56	198	97	196
New Rochelle	1	68	7	1	8	177	78	255	60	242
New York	84	[e] 84	570	663	1,533	72,750	34,491	107,241	28,647	107,241
Niagara Falls	2	63	3	5	8	115	42	157	52	157
Poughkeepsie	1	63	2	0	2	74	21	95		93
Rochester	5	73	66	65	131	2,315	2,320	4,635	1,565	4,635
Schenectady	1	38	4	11	15	444	240	684	200	684
Syracuse	4	93	6	19	25	543	145	688	367	688
Troy	3	96	3	6	9	[f] 535	[f] 57	[f] 592	[f] 403	[f] 592
Utica	2	127	0	9	9	305	89	394	120	394
Watertown	1	90	0	2	2	20	37	57	41	45
White Plains	1	40	1	8	9	140	68	208	115	201
Yonkers	3	82	20	5	25	711	291	1,002	353	1,002
NORTH CAROLINA.										
Charlotte	3		3	1	4	50	0	50		50

[f] Statistics of 1903–4.
[a] Statistics from the New Jersey school report, 1904.
[b] One school was in session 95 nights.
[c] High school, 95 nights; drawing school, 138.
[d] Approximately.
[e] High school, 120 nights.

TABLE 11.—*Statistics of evening schools in cities of 8,000 population and over, 1904–5*—Continued.

City.	Number of schools.	Number of evenings schools were in session.	Teachers.			Pupils.			Average daily attendance.	Pupils of evening schools not attending day schools.
			Men.	Women.	Total.	Men and boys.	Women and girls.	Total.		
1	2	3	4	5	6	7	8	9	10	11
OHIO.										
Akron	4	77	4	0	4	141	8	149	68	149
Cincinnati	6	80	21	26	47	1,587	652	2,239	1,172	.....
Cleveland	61	90	55	8	63	3,306	316	3,622	1,302	3,366
Columbus	2	97	0	3	3	84	14	98	55	98
Dayton	2	a 86	1	1	2	81	62	143	50	.....
Steubenville	1	180	0	1	1	71	1	72	15	.....
Xenia	1	94	0	1	1	33	32	65	20	65
OREGON.										
Portland	3	100	4	5	9	282	58	340	181	.....
PENNSYLVANIA.										
Allegheny	8	80	12	8	20	357	85	442	266	442
Allentown	3	(b)	3	2	5	75	63	138	96	138
Carbondale	5	70	4	1	5	298	33	331	176	331
Erie	2	80	2	6	8	268	44	312	140	312
Lancaster	7	120	3	10	13	263	148	411	182	.....
Mahanoy City	2	60	0	2	2	125	0	125	61	125
Mount Carmel	2	60	2	0	2	143	0	143	22	143
Philadelphia	67	49	23	517	540	.....	.....	22,668	9,090	22,668
Pittsburg*	4	60	1	8	9	652	48	700	301	700
Plymouth	5	c 80	4	2	6	304	57	361	227	361
Reading	11	113	18	0	18	629	200	829	339	829
Shamokin	3	80	2	1	3	98	22	120	60	120
Shenandoah	8	80	1	7	8	477	71	548	168	548
Wilkesbarre	15	80	6	9	15	579	92	671	228	671
Williamsport	1	120	2	0	2	96	31	127	53	127
RHODE ISLAND.										
Central Falls	4	75	18	9	27	295	79	374	228	369
Cumberland	5	40	6	4	10	228	108	336	119	329
East Providence	1	63	2	0	2	52	10	62	15	62
Newport	6	176	3	8	11	215	79	294	92	282
Pawtucket	6	60	17	20	37	524	202	726	466	689
Providence	17	99	92	103	195	3,547	1,647	5,194	2,074	.....
Woonsocket	4	50	4	21	25	315	188	503	178	503
TENNESSEE.										
Memphis	1	106	1	2	3	89	0	89	42	89
Nashville	1	114	1	2	3	117	16	133	42	133
TEXAS.										
Dallas	1	90	3	0	3	109	0	109	67	109
UTAH.										
Ogden	1	60	3	0	3	40	8	48	40	48
VERMONT.										
Burlington	2	136	2	0	2	92	17	109	.....	.....
VIRGINIA.										
Norfolk	4	88	2	2	4	110	0	110	85	110
WASHINGTON.										
Seattle	1	93	10	0	10	442	93	535	176	.....
WISCONSIN.										
Oshkosh	4	60	7	1	8	142	55	197	67	196

* *Statistics of 1903–4.*
a *One school was in session 68 nights.*
b Six months.
c Some schools were in session 90 nights.

TABLE 12.—*Summary, by States, etc., of enrollment, attendance, supervising officers, and teachers in cities and villages containing from 4,000 to 8,000 inhabitants, 1904–5.*

Cities and villages of—	Number of city and village school systems	Population, census of 1900.	Enrollment in public day schools.	Aggregate number of days' attendance of all pupils.	Average daily attendance	Number of supervising officers.	Number of teachers.			Enrollment in private and parochial schools (largely estimated).
							Men.	Women.	Total.	
1	2	3	4	5	6	7	8	9	10	11
United States[a]	618	3 254,096	707,205	97,468,177	543,906	1,213	1,793	14,736	16,698	95,550
North Atlantic Division	232	1,254,148	251,498	35,589,964	194,775	472	506	5,810	6,315	39,272
South Atlantic Division	55	276,432	59,652	7,400,601	43,785	79	191	1,019	1,210	6,375
South Central Division	63	322,084	68,462	8,503,911	49,025	97	206	1,106	1,312	9,384
North Central Division	230	1,245,731	281,967	39,993,857	222,630	480	747	5,910	6,657	34,578
Western Division[b]	32	155,061	45,626	5,979,844	33,760	85	144	890	1,034	5,741
North Atlantic Division.										
Maine	14	77,909	13,907	1,956,872	11,696	25	42	388	430	2,443
New Hampshire	4	24,289	3,724	493,518	2,947	10	7	84	91	1,368
Vermont	6	33,401	5,865	865,149	4,961	17	4	160	164	1,904
Massachusetts	50	309,197	61,922	9,222,348	50,581	162	130	1,602	1,738	5,099
Rhode Island	8	44,617	8,702	1,160,558	6,221	16	21	215	236	679
Connecticut	10	60,172	10,844	1,414,739	7,908	22	18	267	285	2,354
New York	38	200,868	39,857	5,662,956	30,297	80	49	956	1,005	5,944
New Jersey	24	122,677	25,317	3,363,893	17,996	46	34	600	634	7,870
Pennsylvania	72	390,758	81,360	11,299,943	62,378	94	194	1,538	1,732	11,571
South Atlantic Division										
Maryland	3	15,298	3,407	271,624	2,308	4	15	52	67	344
Virginia	7	37,381	6,663	923,290	5,057	7	23	109	132	1,224
West Virginia	8	41,190	9,868	1,213,998	7,636	16	39	192	231	865
North Carolina	8	40,893	9,100	999,851	6,167	13	28	147	175	500
South Carolina	14	64,044	16,009	2,108,353	11,665	19	45	238	283	1,340
Georgia	13	68,732	12,375	1,674,605	9,397	17	39	241	280	1,842
Florida	2	8,285	2,165	208,980	1,496	3	4	40	44	350
South Central Division										
Kentucky	11	60,429	9,964	1,447,910	7,533	16	20	182	208	1,446
Tennessee	4	19,967	4,180	559,268	3,062	4	15	57	72	367
Alabama	10	48,742	8,096	994,884	5,814	17	21	155	176	1,822
Mississippi	6	33,189	8,393	999,310	5,995	16	15	134	149	957
Louisiana	6	32,890	5,938	650,052	4,867	11	18	94	112	1,896
Texas	20	98,499	23,690	2,861,563	16,160	26	94	357	451	2,770
Arkansas	4	19 033	4,517	551,004	3,170	5	14	69	83	620
Indian Territory	2	9,935	3,694	439,920	2,724	2	3	58	61	464

[a] Including estimates for cities and villages not fully reported.
[b] Including estimates for Montana throughout, except for columns 2 and 3, and for Wyoming in columns 5 and 6.

TABLE 12.—*Summary, by States, etc., of enrollment, attendance, supervising officers, and teachers in cities and villages containing from 4,000 to 8,000 inhabitants, 1904–5.*—Continued.

Cities and villages of—	Number of city and village school systems.	Population, census of 1900.	Enrollment in public day schools.	Aggregate number of days' attendance of all pupils.	Average daily attendance.	Number of supervising officers.	Number of teachers.			Enrollment in private and parochial schools (largely estimated).
							Men.	Women.	Total.	
1	2	3	4	5	6	7	8	9	10	11
North Central Division:										
Ohio	50	284,240	59,555	8,836,836	49,213	80	183	1,299	1,482	5,078
Indiana	29	156,300	34,825	4,995,646	28,053	74	160	721	881	3,984
Illinois	35	176,795	40,230	5,781,810	31,540	57	84	795	879	5,102
Michigan	28	142,861	32,102	4,811,646	25,108	62	53	731	784	5,474
Wisconsin	18	90,880	19,413	2,530,194	14,031	45	54	428	482	5,436
Minnesota	11	60,543	13,451	1,953,207	10,873	22	14	307	321	2,270
Iowa	19	89,467	21,626	3,034,333	17,187	50	42	503	545	1,295
Missouri	23	120,469	27,908	3,588,066	20,555	53	92	498	590	2,800
South Dakota	4	18,477	4,367	615,561	3,389	8	13	107	120	398
Nebraska	7	41,788	10,339	1,521,208	8,550	12	11	211	222	1,030
Kansas	12	63,931	18,121	2,335,770	14,001	18	41	310	351	839
Western Division:										
Montana	1	4,366	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming	1	4,363	937	.....	.....	1	2	17	19	0
Colorado	4	20,235	6,004	772,420	4,775	26	18	131	149	521
New Mexico	3	15,391	3,283	400,881	2,311	4	8	53	61	1,100
Arizona	1	5,544	1,905	237,513	1,319	4	7	38	45	353
Utah	3	15,305	4,183	570,305	3,279	11	21	62	83	701
Nevada	1	4,500	1,631	181,608	986	2	2	26	28	120
Idaho	1	4,040	1,215	171,564	988	1	2	25	27	270
Washington	2	8,688	2,280	295,066	1,700	2	9	39	48	400
Oregon	3	15,427	4,715	614,101	3,472	9	10	95	105	820
California	12	57,795	18,223	2,446,379	13,736	24	63	397	460	1,376

TABLE 13.—*Summary by States, etc., of school property and expenditures in cities and villages containing from 4,000 to 8,000 inhabitants, 1904–5.*

Cities and villages of—	Number of school buildings.	Number of seats or sittings for study.	Value of all public property used for school purposes.	Expenditure for supervision and teaching.	Expenditure for all purposes (loans and bonds excepted).
1	2	3	4	5	6
United States[a]	3,122	714,175	$49,990,848	$8,786,570	$13,580,101
North Atlantic Division	1,393	261,684	19,559,108	3,390,256	5,409,799
South Atlantic Division	213	57,517	2,310,735	478,659	650,111
South Central Division	237	61,280	2,794,476	636,614	933,645
North Central Division	1,080	289,525	21,166,746	3,525,733	5,532,395
Western Division[b]	199	44,169	4,159,783	746,308	1,058,151
North Atlantic Division:					
Maine	180	16,118	742,000	194,433	254,097
New Hampshire	35	4,355	258,800	49,706	65,166
Vermont	33	6,529	530,000	86,249	156,473
Massachusetts	474	65,787	6,162,100	963,480	1,427,726
Rhode Island	88	9,340	642,175	110,584	181,985
Connecticut	93	11,419	679,550	141,456	220,007
New York	138	39,633	2,841,892	566,273	935,405
New Jersey	107	24,796	1,975,280	392,808	644,165
Pennsylvania	345	83,717	5,727,211	892,267	1,522,775
South Atlantic Division:					
Maryland	13	2,590	148,000	24,264	37,482
Virginia	22	7,632	223,325	50,510	74,639
West Virginia	43	9,800	808,310	93,044	173,848
North Carolina	20	9,020	275,000	68,022	80,463
South Carolina	57	14,473	406,950	102,937	125,857
Georgia	41	12,302	358,150	125,022	147,264
Florida	8	1,700	31,000	13,060	16,560
South Central Division:					
Kentucky	35	8,569	431,181	107,742	146,081
Tennessee	13	3,500	125,050	29,900	44,204
Alabama	29	7,730	272,800	71,235	90,904
Mississippi	26	7,805	373,200	67,915	123,080
Louisiana	26	5,343	258,200	59,880	67,017
Texas	83	20,778	914,045	229,389	296,146
Arkansas	15	4,225	220,000	40,153	114,233
Indian Territory	10	3,300	200,000	30,400	50,000
North Central Division:					
Ohio	224	64,327	5,213,700	790,347	1,160,809
Indiana	124	35,211	2,791,350	519,178	806,041
Illinois	157	40,842	2,424,109	467,412	725,230
Michigan	129	31,638	2,380,900	422,168	623,462
Wisconsin	83	19,525	1,873,500	252,053	383,415
Minnesota	54	13,555	921,000	162,491	337,082
Iowa	86	21,552	1,761,486	276,257	533,095
Missouri	103	30,119	1,582,440	278,676	427,629
South Dakota	22	4,400	326,161	79,338	136,749
Nebraska	45	10,231	994,100	112,184	171,788
Kansas	53	17,925	1,196,000	165,629	227,095
Western Division					
Montana					
Wyoming	5	875	25,000	11,870	14,000
Colorado	29	7,000	537,000	105,675	132,544
New Mexico	12	2,850	297,850	33,277	90,883
Arizona	7		196,000	38,300	52,380
Utah	18	4,133	268,707	51,311	97,784
Nevada	4		90,000	22,340	28,583
Idaho	2	1,200	77,576	17,817	32,136
Washington	8	1,950	136,450	29,807	43,827
Oregon	15	4,484	702,000	66,117	92,863
California	95	17,077	1,097,200	359,794	458,151

[a] Including estimates for cities and villages not fully reported.
[b] Including estimates for Montana throughout the table, and for Arizona and Nevada in column 3.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5.*

	City.	Population, census of 1900	School census age	Children of school census age	Pupils in private and parochial schools	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils.	Average daily attendance	Supervising officers.	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and supervising officers	Total expenditure
						Boys.	Girls.	Total					Men.	Women.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	ALABAMA.																			
1	Bessemer	6,358	7-21	2,927	60	658	757	1,415	175	177,450	1,014	2	2	26	28	4	1,125	$35,000	$11,300	$13,800
2	Eufaula	4,532	7-21	1,825	*30	263	296	559	170	76,254	426	1	2	11	13	3	560	14,000	6,200	6,900
3	Florence	6,478	7-21	2,150	250	393	479	872	154	84,157	557	1	2	16	18	4	800	25,000	5,889	7,000
4	Gadsden	4,282	7-21	2,325	20	554	656	1,210	160	166,860	927	1	3	20	23	3	1,250	40,000	9,000	9,750
5	New Decatur	4,437																		
6	Opelika	4,246	7-21	1,964	*100	350	475	825	180	108,200	590	2	2	15	17	2	775	30,000	7,300	8,000
7	Phoenix*	4,163	7-21	1,800	200	200	225	425	180	58,500	325	6	4	10	14	3	500	5,000	4,000	
8	Talladega	5,056	7-21	1,700	400	247	285	532	176	72,848	438	1	1	15	16	3	600	35,000	7,250	8,500
9	Troy	4,097	7-21	2,099	0	286	398	684	182	76,302	471	1	1	13	14	2	600	30,000	5,673	14,426
10	Tuscaloosa	5,094	7-21	2,737	325	389	453	841	160	90,880	543	1	2	17	19	3	830	40,000	7,980	9,266
	ARIZONA.																			
11	Phoenix	5,544	6-21	2,258	353	979	926	1,905	180	237,511	1,319	4	7	38	45	7		198,000	29,380	42,380
	ARKANSAS.																			
12	Fayetteville	4,061	6-21	2,000	*150	534	540	1,074	179	130,000	788	1	3	13	16	4	1,075	15,000	7,500	8,500
13	Helena	5,550	6-21	2,400	200	400	500	900	178	131,364	736	2	4	17	21	3	950	*60,000	*9,675	*14,000
14	Jonesboro	4,508	6-21	2,211	*200	696	780	1,476	160	148,160	926	1	5	18	23	4	*1,000	35,000	8,778	20,933
15	Texarkana	4,914	6-21	2,560	70	509	559	1,068	180	141,480	786	1	2	21	23	4	1,200	110,000	14,200	70,800
	CALIFORNIA.																			
16	Bakersfield	4,836	5-17	1,271	0	494	473	967	170	127,007	747	3	1	18	19	3	918	$5,400	17,910	23,174
17	Grass Valley	4,719	5-17	1,325	93	451	440	891	184	146,357	795	1	4	14	18	7	900	40,000	18,400	22,250
18	Napa	4,036	5-17	1,290	*24	a524	a528	a1,052	187½	155,303	828	0	3	21	24	4	1,100	80,000	17,550	*23,408
19	Pomona	5,526	5-17	1,639	92	802	731	1,533	169	186,444	1,115	1	1	34	35	8	1,232	*90,000	22,330	*31,161
20	Redlands Redlands school district	4,797	5-17	2,340	172	888	817	1,705	170	204,036	1,194	3	4	37	41	10	1,571	200,000	32,340	45,000
21	Lugonia school district		5-17	2,000	138	850	800	1,650	172	226,000	1,226	5	11	42	53	12	1,620	300,000	40,000	56,000

22	San Bernardino	6,150	5-17	2,364	150	955	937	1,892	174	254,921	1,494	2	6	42	48	12	.....	150,000	34,593	44,000
23	San Rafael	3,879	...	.....	.....	...	...	.....	.....	.....	.....	...	...	...	...	...	.....	.....	.....	.....
24	Santa Ana	4,033	5-17	1,686	0	897	940	1,832	177	280,691	1,431	...	...	41	52	8	1,650	140,000	43,538	48,799
25	Santa Barbara	6,567	5-17	2,117	192	874	927	1,801	188	253,571	1,354	4	8	42	50	12	1,750	200,000	45,000	57,000
26	Santa Cruz	5,659	5-17	2,156	*324	783	878	1,661	188	218,663	1,162	1	5	38	43	8	1,696	175,000	35,000	42,000
27	Santa Rosa	6,673	5-17	1,906	100	949	1,045	1,994	188	280,040	1,378	...	...	33	37	5	1,727	60,000	28,849	*32,000
	COLORADO.																			
28	Boulder	6,150	...	2,060	*100	1,003	967	1,960	176	273,921	1,567	11	...	40	45	8	2,800	*141,000	*29,345	.....
29	Canyon City	3,775	6-21	1,256	.....	621	615	1,236	175	184,372	882	3	...	24	29	7	1,400	121,000	21,270	25,944
30	Trinidad	5,345	6-21	2,121	300	904	999	1,903	178	226,416	1,272	6	6	36	39	3	1,800	200,000	26,060	30,000
31	Victor	4,986	6-21	1,400	25	445	460	905	180	117,720	654	6	5	31	36	6	1,200	75,000	20,000	40,000
	CONNECTICUT.																			
32	Derby	7,930	4-16	1,864	650	414	444	858	185	135,434	732	3	...	26	27	1	920	80,000	16,000	20,062
33	East Hartford	6,406	4-16	1 643	38	....	....	1,622	178	196,650	1,116	...	...	39	44	16	1,730	75,100	19 865	24,835
34	Huntington*	5,572	4-16	1,331	91	...	...	1,126	188	161,206	858	1	...	27	28	10	1,135	68,850	14,060	18,000
35	Killingly	6,835	4-16	1,532	195	...	...	1,263	184	164,005	891	2	5	29	34	12	1,362	59,500	15 357	20,962
36	New Milford	4,804	4-16	1,048	38	429	502	931	181	130,170	719	1	2	23	26	15	1,075	27,600	8,948	11,825
37	Putnam	6,667	4-16	1,554	531	...	...	805	180	90,180	501	2	2	24	26	7	870	69,600	11,910	16,000
38	Southington	5,890	4-16	1,274	9	867	804	1,171	180	162,220	902	2	...	33	33	12	1,494	85,000	17,280	23,941
39	West Haven*	6,247	5-16	1,262	.....	553	625	1,278	170	178,000	995	...	0	27	27	6	1,287	80,000	15,715	55,182
40	Westport	4,017	5-16	840	25	336	298	634	185	74,827	404	...	1	18	19	10	659	64,000	9,350	12,000
41	Winsted	6,804	4-16	1,701	548	553	595	1,148	180	122,895	686	3	0	22	23	3	948	70,000	12,981	15,500
	FLORIDA.																			
42	Lake City	4,013	6-21	.....	150	325	430	955	160	114,600	716	2	2	13	15	2	400	1,.000	5,000	5,500
43	St. Augustine	4,272	6-21	1,280	200	360	650	1,210	154	94,280	790	1	2	27	29	6	1,200	20,000	8,000	11,000
	GEORGIA.																			
44	Albany	4,606	6-18	1,444	420	...	...	760	180	104,400	580	3	5	20	24	4	1,100	13,000	6,350	6,350
45	Americus	7,674	6-18	1,891	300	576	682	1,258	178	184,024	1,034	...	3	27	30	3	1,200	30,000	14,804	17,407
46	Dalton*	4,315	.....	.....	.....	350	408	758	177	99,963	564	...	1	12	13	3	.....	5,000	6,000	.....
47	Elberton	3,834	6-18	841	.....	...	...	563	173	.....	.....	...	1	13	14	2	600	7,000	6,152	6,921
48	Gainesville	4,382	6-18	1,554	0	490	556	1,046	175	121,485	695	...	...	18	19	2	1,150	33,000	7,042	7,827
49	Griffin*	6,857	6-18	1,658	200	448	515	963	180	112,300	624	...	5	16	21	4	800	50,000	10,345	11,995
50	Lagrange	4,274	10-18	1,039	100	431	472	903	175	111,135	636	...	6	21	27	5	932	26,000	10,921	16,141
51	Marietta	4,446	6-18	1,400	0	445	529	974	180	120,420	669	...	3	15	18	...	900	20,780	8,753	10,873
52	Milledgeville	4,219	.....	.....	.....	...	...	.....	.....	.....	.....	...	...	...	...	...	.....	.....	.....	.....
53	Rome	7,291	6-18	2,400	180	742	788	1,530	180	216,000	1,200	2	3	28	31	...	1,200	40,600	14,500	16,700
54	Thomasville	5,322	6-18	1,200	*250	*304	*340	*644	176	*92,400	*825	...	4	13	17	...	600	15,000	14,000	.....
55	Vallosta	5,613	6-18	1,600	150	566	738	1,304	180	211,320	1,174	1	3	19	22	...	1,200	40,000	9,420	10,960
56	Waycross	5,919	6-16	1,616	40	400	522	922	177	123,900	700	2	2	15	17	2	1,000	35,000	10,000	11,000
	IDAHO.																			
57	Pocatello	4,046	6-21	1,755	250	599	617	1,216	174	171,564	986	1	2	25	27	2	1,200	77,676	17,817	32,136

*Statistics of 1903-4.

• Does not include enrollment in high school.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5*—Continued.

	City.	Population, census of 1900.	School census age.	Children of school census age.	Pupils in private and parochial schools.	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days attendance of all pupils.	Average daily attendance.	Supervising officers.	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and supervising officers.	Total expenditure.
						Boys.	Girls.	Total.					Men.	Women.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	ILLINOIS.																			
58	Beardstown	4,827	6-21	1,535	65	565	575	1,140	184	169,330	922	2	2	26	28	8	1,425	$50,000	$12,903	$20,472
59	Belvidere (north side)	6,937	6-21	905	125	309	340	649	195	114,464	584	2	1	15	16	2	600	30,000	8,000	*16,000
60	Blue Island*	6,114	6-21	1,914	340	714	684	1,398	193	236,232	1,224	1	1	31	32	5	....	75,000	26,400	32,124
61	Canton	6,564	6-21	2,098	....	988	992	1,980	176	260,158	1,478	3	6	36	42	7	1,800	152,278	22,487	30,147
62	Centralia*	6,721	6-21	2,222	156	827	860	1,687	185	232,826	1,411	1	4	31	35	7	1,602	50,000	14,027	19,725
63	Charleston	5,488	6-21	1,952	....	526	487	1,013	b 171	136,869	838	2	5	21	26	4	1,148	60,000	13,738	19,001
64	Chicago Heights	5,100	6-21	2,603	75	881	822	1,703	196	248,662	1,268	1	0	36	36	8	1,900	73,.30	17,750	29,000
65	Clinton	4,452	6-21	1,500	20	608	659	1,267	183	182,309	996	2	1	28	29	3	1,300	150,000	16,400	21,000
66	Collinsville	4,021	6-21	2,040	800	577	547	1,124	159	127,200	800	1	3	16	19	4	1,100	36,000	8,352	12,000
67	De Kalb	5,904	6-21	1,639	0	596	628	1,224	190	185,211	980	5	0	26	26	5	1,400	105,000	16,022	15,399
68	Duquoin	4,353	6-21	2,300	175	322	803	1,125	179	147,317	823	1	3	17	20	4	1,250	50,000	8,241	11,530
69	Edwardsville*	4,157	6-21	1,307	125	....	....	....	193	....	....	1	2	18	20	3	....	40,780	....	12,000
70	Galena	5 005	6-21	*1,478	225	350	406	756	190	133,000	700	1	2	16	18	6	900	*75,000	11,000	50,000
71	Harlem	4,085	6-21	1,275	153	377	385	762	200	123,166	616	2	2	13	15	2	714	56,681	8,429	13,156
72	Harvey	5,795	6-21	....	0	562	516	1,078	174	151,107	869	2	0	22	22	5	1,050	65,000	12,800	20,000
73	Lagrange	3,909	6-21	1,191	*118	398	397	795	196	112,899	576	3	1	20	21	3	900	75,000	16,991	23,221
74	Litchfield	5,918	6-21	1,576	50	617	684	1,301	c 167	178,827	1,027	2	1	25	26	4	1,424	15,000	13,500	20,000
75	Macomb	5,375	6-21	....	50	516	529	1,045	192	161,691	821	2	2	24	26	4	1,100	70,000	13,565	17,500
76	Maywood*	4,532	6-21	2,764	324	866	805	1,671	193	246,257	1,260	1	5	31	36	8	1,529	113,000	23,395	63,302
77	Metropolis	4,069	6-21	1,319	10	462	501	963	187	119,867	641	1	3	14	17	4	1,000	35,000	6,570	9,000
78	Morris	4,273	6-21	1,252	86	524	534	1,058	185	138,750	750	1	3	20	23	5	1,108	65,000	13,193	15,000
79	Mount Carmel	4,311	6-21	1,100	*125	540	560	1,100	180	162,000	900	1	4	20	24	6	1,100	55,000	9,000	12,000
80	Mount Vernon	5,216	6-21	2,430	0	878	871	1,749	176	237,345	1,349	1	9	27	36	4	1,870	58,000	16,460	25,832
81	Murphysboro	6,403	6-21	1,921	378	623	607	1,230	173	151,202	874	1	2	22	24	3	650	48,000	9,503	13,544
82	Olney	4,260	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
83	Pana	5,530	6-21	2,400	350	495	605	1,100	167	157,982	946	2	4	24	28	5	1,100	40,000	12,500	16,000
84	Paris	8,105	6-21	1,925	200	671	741	1,412	181	199,944	1,101	1	4	28	32	3	1,455	90,000	16,005	....
85	Peru	6,863	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
86	Pontiac	4,266	6-21	1,512	175	487	475	962	190	143,780	747	1	0	25	25	4	966	80,000	10,852	....
87	Princeton*	4,023	6-21	1,250	*60	352	341	693	180	95,657	531	2	0	16	16	3	750	65,000	8,850	13,500
88	Spring Valley	6,214	6-21	2,400	600	595	588	1,183	190	170,168	896	1	0	21	21	4	1,200	100,000	15,000	20,000

89	Sterling: District No 3 (Union school)	6,309	6-21	1,040	125	416	419	835	184	126,279	686		0	20	20	4	800	80,000	10,865	16,734
90	District No. 8 (Wallace school)		6-21	715	70	210	195	405	188	61,040	324		0	10	10	2	500	50,000	6,605	8,457
91	Taylorville	4,248	6-21	961	0	361	357	718	184	80,254	544	2		14	15	2	760	41,250	7,480	13,240
92	Urbana	5,728	6-21	2,246	56	772	806	1,578	185	231,242	1,257		7	29	36	5	1,500	77,400	19,700	27,359
	INDIANA.																			
93	Bedford	6,115	6-21	1,800	0	749	851	1,600	180	234,180	1,301	3	3	33	36		1,500	120,000	19,000	23,120
94	Bloomington	3,460	6-21	1,900	0	806	843	1,649	180	226,900	1,272	3	7	33	40		1,496	101,000	22,850	28,920
95	Bunton	4,479	6-21	1,355	0	800	547	1,047	200	172,680	863	4	6	16	22		1,100	65,000	16,100	24,349
96	Connersville	6,836	6-21	1,832	200	573	608	1,181	170	166,920	976	3	5	24	29		1,207	115,000	17,118	28,225
97	Crawfordsville	6,649	6-21	1,916	127	645	867	1,512	178	212,532	1,194	4	7	30	37	5	1,542	181,000	20,940	29,700
98	Decatur	4,142	6-21	1,234	375	390	412	802	177	115,634	653	1	7	16	23	4	840	50,000	14,450	14,756
99	Frankfort	7,100	6-21	2,148	0	859	920	1,779	180	259,488	1,441	3	8	39	47	5	*1,750	300,000	27,960	30,000
100	Franklin	4,005	6-21	1,185	0	435	459	894	176	129,884	738	3	5	21	26	3	852	49,000	15,068	19,531
101	Goshen	7,810	6-21	2,230	123	....	....	1,584	178	232,943	1,294	4	10	38	48	8	2,000	177,550	26,018	*40,000
102	Greenfield	4,489	6-21	1,267	0	521	536	1,057	160	137,753	870	3	8	21	29	4	1,020	80,000	15,339	23,530
103	Greensburg	5,034	6-21	1,339	90	516	494	1,010	180	149,287	829	2	3	23	26		1,000	65,800	15,158	23,324
104	Hartford City	5,912	6-21	1,847	92	694	780	1,333	180	182,509	1,025	2	0	27	36		1,280	83,000	20,503	42,399
105	Laporte	7,113	6-21	4,310	600	770	779	1,549	185	216,432	1,169	1	7	35	42		1,490	150,000	20,763	45,362
106	Lawrenceburg	4,326	6-21	1,313	200	385	406	791	180	127,080	706	3	4	18	22		800	50,000	12,000	15,000
107	Lebanon	4,465	6-21	1,299	0	596	628	1,224	180	181,080	1,006		4	24	28		1,200	78,000	15,267	*.7,000
108	Madison	7,835	6-21	2,592	250	682	732	1,414	180	202,140	1,123	7	8	32	45		1,300	100,000	21,864	35 394
109	Martinsville	4,038	6-21	1,256	0	501	539	1,040	180	152,928	849	3	4	21	25		1,100	50 000	16,850	21,816
110	Mishawaka	5,560	6-21	2,100	500	628	543	1,071	177	155,955	881	5	2	30	32	5	1,200	80,000	17,150	40,000
111	Mount Vernon	5,132	6-21	1,534	200	628	602	1,230	180	181,116	1,006	2	7	23	30	5	1,200	71,000	18,359	17,840
112	Nobiesville	4,792	6-21	1,425	0	694	676	1,370	160	172,800	1,080	2	7	22	29	4	1,500	100,000	15,600	23,400
113	Portland	4,798	6-21	1,444	0	627	603	1,230	180	164,335	915		7	21	28	4	1,400	126,000	15,000	22,698
114	Princeton	6,041	6-21	1,836	97	722	703	1,428	176	201,457	1,145	2	9	25	34	4	1,200	85 000	20,747	45,312
115	Rushville	4,841	6-21	1,206	200	418	432	850	178	139,060	725	3	4	20	24	6	850	75,000	14,400	17,400
116	Seymour	6,445	6-21	1,603	250	511	522	1,033	176	138,794	789	2	3	24	27	5	1,200	100,000	13,000	17,000
117	Shelbyville	7,160	6-21	1,920	150	848	891	1,739	170	220,780	1,334		9	33	42	6	1,400	125 000	24,533	36,000
118	Tipton	3,764	6-21	1,051	150	412	428	840	180	118,125	656		4	14	18	3	750	25,000	10,404	13,000
119	Valparaiso	6,280	6-21	1,625	155	476	541	1,017	178	167,676	942		0	24	24	5	980	97,000	19,980	32,000
120	Warsaw	3,987	6-21	1,030	5	430	500	930	176	144,000	800		6	14	20	3	930	45,000	12,000	45,000
121	Whiting*	3,963	6-21	1,124	200	324	299	623	200	94,128	471		2	20	22	3	600	60,000	16,075	32,075
	INDIAN TERRITORY.																			
122	Ardmore	5,681	6-20	2,225	100	925	950	1,875	140	176,400	1,260		2	27	30	6	1,500	75,000	15,000	30,000
123	Muskogee	4,254	6-21	*1,500	*364	845	974	1,819	180	263,520	1,464			31	32		1,800	125,000	18,400	20,000
	IOWA.																			
124	Atlantic	5,046	5-21	1,236	0	483	596	1,079	180	157,780	871		0	26	26		1,200	60,000	13,345	20,000
125	Cedar Falls	5,319	....	1,389	60	567	555	1,122	177	151,335	855			29	30	5	.....	100,000	16,989	28,400
126	Centerville	5,256	6-21	2,078	0	758	856	1,614	180	232,560	1,292	4	4	20	24	4	2,000	97,480	16,000	*32,329
127	Charlton*	3,989	5-21	1,236	0	509	571	1,080	177	145,699	823	2		23	24	4	1,120	81,000	11,108	15,499

*Statistics of 1903–4.
*Statistics do not include high school.
[b] Grades 7 to 12, 182 days.
[c] High school, 168 days.
[d] Includes Melrose Park.
[e] Does not include high school.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5*—Continued.

	City.	Population, census of 1900.	School census age.	Children of school census age.	Pupils in private and parochial schools.	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils	Average daily attendance.	Supervising officers.	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and supervising officers.	Total expenditure.
						Boys.	Girls.	Total.					Men.	Women.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	IOWA—continued.																			
128	Charles City	4,227	5-21	1,281	*43	486	594	1,080	177	138,060	780	4	3	27	30	5	901	$105,000	$14,910	$23,000
129	Cherokee	3,865	6-21	1,172	0	455	517	982	176	136,402	775	6	2	22	25	3	156	106,000	13,208	20,000
130	Creston	7,782	5-21	2,396	133	882	899	1,781	177	245,710	1,388	1	5	38	43	8	1,660	135,000	21,706	30,684
131	Fairfield	4,689	5-21	1,301	*50	432	519	951	176	134,185	762	4	3	20	23	2	1,000	40,000	11,295	15,308
132	Grinnell	3,960	5-21	1,356	20	539	607	1,146	175	163,065	935	3	2	27	29	5	1,164	125,000	14,500	23,000
133	Lemars	4,146	5-21	*1,483	206	487	543	1,030	176	130,230	796	3	1	26	27	3	1,000	75,400	13,741	37,622
134	Marion	4,102	5-21	1,129	43	414	460	874	174	126,412	719	2	1	22	23	4	900	65,000	12,256	20,453
135	Mason City	6,746	5-21	2,100	400	739	723	1,462	176	220,236	1,302	5	2	39	41	6	1,600	250,000	22,000	96,000
136	Missouri Valley	4,010	5-21	1,106	0	430	467	897	176	126,720	720	1	2	22	24	3	1,074	66,000	12,601	16,000
137	Mount Pleasant	4,109	5-21	1,020	.....	384	471	855	176	121,929	692	3	1	25	26	5	1,000	40,000	11,273	13,467
138	Oelwein	5,142	5-21	1,552	50	.....	.....	1,279	176	167,024	949	2	0	27	27	4	1,200	62,250	12,538	15,108
139	Perry	3,996	7-21	1,150	16	445	455	900	168	130,104	828	2	2	27	29	5	570	100,000	12,300	*16,305
140	Red Oak	4,356	5-21	1,538	.....	635	617	1,252	176	174,768	993	4	4	31	35	6	1,260	.....	.....	.....
141	Washington	4,255	5-21	1,477	120	504	595	1,099	178	151,122	849	2	4	25	29	6	1,020	80,000	16,000	20,000
142	Webster City	4,313	5-21	1,260	28	549	594	1,143	180	154,440	858	1	3	27	30	4	1,200	80,000	14,500	28,000
	KANSAS.																			
143	Argentine	5,378	5-21	2,004	250	602	707	1,309	180	170,037	1,002	1	4	23	27	5	1,200	60,000	11,280	14,922
144	Arkansas City	6,140	6-21	1,850	0	783	854	1,637	158	201,924	1,278	1	4	30	34	6	1,750	150,000	14,218	19,156
145	Chanute	4,208	5-21	2,400	0	1,000	953	1,953	158	248,162	1,539	2	3	34	37	5	2,000	180,000	15,000	20,000
146	Coffeyville	4,953	5-21	2,543	40	1,100	1,130	2,230	158	232,320	1,476	2	4	36	40	7	1,850	90,000	17,200	21,331
147	Independence	4,351	5-21	2,000	75	795	820	1,615	160	208,300	1,300	1	3	27	30	2	1,600	75,000	13,100	17,300
148	Junction City	4,695	6-21	1,891	36	532	671	1,303	178	187,968	1,056	2	2	23	25	5	1,250	84,000	14,040	18,250
149	Newton	6,208	5-21	2,405	120	701	724	1,425	176	202,928	1,153	2	5	24	29	3	1,500	85,000	20,000	22,000
150	Osawatomie*	4,191	6-20	1,002	0	434	486	920	180	127,800	710	3	1	14	15	2	350	36,000	8,670	.....
151	Ottawa	6,934	5-21	2,340	50	863	971	1,834	167	237,975	1,425	1	3	32	35	4	1,200	58,000	15,822	26,813
152	Salina	6,074	5-21	2,200	150	647	785	1,432	167	191,549	1,147	1	8	24	32	6	1,480	100,000	17,730	30,600
153	Wellington*	4,245	5-21	1,462	50	504	460	964	168	128,576	761	1	0	18	18	3	.....	125,000	8,150	11,199
154	Winfield	5,554	5-21	2,482	68	732	767	1,499	168	202,221	1,184	1	4	25	29	5	1,824	135,000	12,364	17,087

	KENTUCKY.																			
155	Ashland	6,800	6-20	1,921	200	732	760	1,492	180	208,100	1,145			26	29	6	1,500	77,641	13,144	18,964
156	Bellevue	6,332	6-20	2,010	.....	476	488	958	200	191,800	768	1	2	21	23	3	1,050	50,000	12,625	18,964
157	Danville	4,285	6-20	1,519	54	411	394	775	190	85,940	483	2	4	9	13	2	675	19,000	5,720	.....
158	Dayton	6,104	6-21	1,933	280	465	474	939	181	144,306	756	1	0	20	20	2	1,000	*75,000	14,719	16,971
159	Georgetown	3,822	6-20	598	60	215	223	438	181	54,300	300			11	12	1	400	15,000	5,240	7,829
160	Hopkinsville	7,280	6-20	1,206	100	407	450	857	192	125,450	650	1	*0	22	22	2	*874	50,000	12,708	13,625
161	Maysville	6,423	6-20	1,454	186	676	684	1,160	200	216,000	1,000	2	5	16	21	6	....	25,000	12,300	14,020
162	Middlesboro	4,162	6-20	1,375	0	324	426	750	140	63,840	456			11	13	4	780	6,000	4,060	5,100
163	Paris	4,603	6-20	1,563	125	370	457	827	190	100,420	528			15	19	2	800	50,000	10,000	16,046
164	Richmond[b]	4,653	6-20	759	150	272	298	570	195	72,930	374			12	14		800	22,500	5,650	[c]12,206
165	Winchester	5,964	6-20	1,606	160	573	645	1,218	192	184,984	962			14	22	5	960	30,000	11,871	.....
	LOUISIANA.																			
166	Alexandria	5,648	6-21	2,000	400	500	560	1,060	176	.....	.....	2		10	13	4	800	40,000	*7,500	.....
167	Crowley*	4,214	6-18	1,200	250	418	437	855	153	95,778	626			13	15	3	780	35,000	6,500	.....
168	Donaldsonville	4,105	6-18	955	200	315	340	655	169	75,205	445	1		12	14	4	546	8,700	4,485	5,242
169	Lake Charles	6,080	6-18	2,000	..	948	1,060	1,008	153	271,254	1,773	3		20	33	6	1,754	40,500	17,480	20,480
170	Monroe	5,428	6-18	*1,240	200	285	330	635	189	85,318	451	3		17	20	5	700	35,000	15,500	16,000
171	New Iberia	6,815	6-18	*2,000	*300	350	385	735	178	122,500	703			16	17	5	764	40,000	8,415	9,615
	MAINE.																			
172	Belfast	4,815	8-21	1,061	0	...	...	682	167	.....	.....	1	2	23	25	10	. .	30,000	10,674	14,682
173	Brewer	4,635	8-21	1,301	7	466	472	938	165	122,100	740	4	2	28	30	11	950	40,000	9,738	14,283
174	Brunswick	5,210	8-21	1,633	824	409	400	809	172	121,350	708	1	4	23	34	21	1,200	58,000	17,120	19,120
175	Calais	7,655	8-21	2,611	135	...	..	1,343	180	217,220	1,222		3	22	35	13	1,283	45,000	16,219	21,089
176	Eastport	5,311	8-21	1,742	*0	410	533	943	185	132,275	715	1	4	23	27	8	1,000	60,000	11,000	15,800
177	Ellsworth	4,297	8-21	1,411	0	421	446	867	..	.....	650		5	20	26	21	*1,500	12,000	9,350	16,600
178	Gardiner	5,801	8-21	1,447	8	526	555	1,081	170	141,780	824	2	3	24	27	11	1,200	40,426	12,428	21,446
179	Houlton	4,986	8-21	1,484	0	..	..	954	..	.....	800	4	4	24	28	12	*1,140	45,000	9,464	15,980
180	Oldtown	5,763	8-21	1,679	300	520	553	1,073	[d]170	156,570	921	1	3	29	32	12	*1,050	90,000	12,727	16,709
181	Saco	6,122	8-21	1,956	150	584	583	1,167	185	189,810	1,026	1		23	24	14	1,200	65,000	18,455	18,946
182	Sanford	6,078	8-21	2,629	326	577	512	889	173	122,311	707	3		24	35	11	1,100	60,000	16,439	20,108
183	Skowhegan*	4,266	8-21	1,347	248	..	..	721	..	.....	539	3	3	21	24	12	780	50,000	10,932	18,331
184	South Portland	6,257	8-21	1,791	0	530	607	1,143	133	144,305	1,085		2	32	34	14	1,300	60,000	11,701	16,095
185	Westbrook	7,293	8-21	2,751	445	607	685	1,292	178	188,475	1,077		5	33	38	10	*1,324	100,000	15,186	26,288
	MARYLAND.																			
186	Cambridge	5,747	6-21	1,400	100	...	...	1,270	180	.....	.....		*8	*18	26		700	60,000	8,423	.....
187	Frostburg	5,274	6-18	1,300	180	475	025	1,100	195	156,000	800	2	2	19	21	2	1,120	50,000	8,225	10,925
188	Salisbury	4,277	.....	.....	.....	.....	.....	1,037	[e]182	115,624	692		5	15	20	4	. .	25,000	7,516	13,596

* Statistics of 1903–4.
[a] Statistics do not include Sumner County high school.
[b] For white schools only.
[c] Includes property, etc., of colored school.
[d] High school, 180 days.
[e] Colored schools, 96 days.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5*—Continued.

	City.	Population, census of 1900.	School census age.	Children of school census age.	Pupils in private and parochial schools.	Different pupils enrolled in public day schools.			Number of days the schools were actually in session	Aggregate number of days' attendance of all pupils.	Average daily attendance.	Supervising officers	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and supervising officers.	Total expenditure.
						Boys.	Girls.	Total.					Men.	Women.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	MASSACHUSETTS.																			
189	Abington	4,499		850	0	490	517	1,007	177	159,276	884	3	3	24	27	5	1,000	$150,000	$17,390	$21,000
190	Amherst	5,028	7-14	526	15	446	450	896	174	126,568	727	4	3	24	27	10	1,000	75,000	13,624	19,145
191	Andover	6,813	7-14	881	14	607	650	1,257	183	187,898	1,026	5	2	42	44	12	1,343	226,000	25,734	46,295
192	Athol	7,061	7-14	803	0	583	619	1,202	188	194,392	1,034	3	2	28	30	10	1,400	125,000	16,556	25,113
193	Barnstable	4,364	7-14	459	0			741	166	103,916	626	3	7	20	27	10	784	80,000	15,166	23,895
194	Belmont	3,929	5-13	733	*35	410	351	761	185	113,775	615	5	1	21	22	5	840	143,000	16,522	24,576
195	Blackstone	5,721	7-14	975	0	490	485	975	200	176,000	880	1	1	33	34	10	580	65,000	13,700	16,382
196	Braintree	5,961	5-15	1,212	*15	723	762	1,485	188	216,302	1,151	3	2	35	37	7	1,400	90,000	21,713	30,913
197	Bridgewater	5,806	5-14	539	0	467	506	973	182	152,880	774	1	4	31	35	9	1,200	25,000	5,250	8,848
198	Canton	4,594	5-15	803	*264	313	344	657	200	99,590	497	2	2	19	21	8	800	50,000	13,440	13,500
199	Concord	5,652	7-14	623	20	506	500	1,006	185	172,849	934	3	5	29	34	4	1,250	110,000	23,143	30,240
200	Dedham	7,457	7-14	1,022	25	721	883	1,604	186	258,340	1,390	4	5	45	50	7	1,600	275,000	37,387	51,977
201	Easthampton	5,603	7-14	816	200	616	642	1,258	170	178,321	1,046	4	2	32	34	9	1,300	60,000	15,808	21,733
202	Easton	4,837	5-15	943	0	499	528	1,027	190	165,300	870	1	1	32	33	10	1,232	120,000	17,406	27,306
203	Franklin	5,017	7-14	720		507	521	1,028	190	140,123	828	3	1	24	25	9	1,015		12,696	24,700
204	Grafton	4,809	7-14	661	5	385	447	832	175	130,121	743	2	1	24	25	7	922	80,000	12,524	22,420
205	Great Barrington	5,854	7-14	1,037	*50	564	585	1,149	186	185,210	985	3	3	36	39	12	1,100	250,000	15,981	26,321
206	Hingham	5,059	5-15	723	60	434	455	889	200	152,000	760	3	4	23	27	8	1,020	150,000	16,549	25,987
207	Hudson	5,454	5-15	970	0	532	536	1,068	187	161,381	863	3	3	23	26	7	1,200	87,500	14,178	22,110
208	Ipswich	4,058	5-15	860	0	425	*413	838	a 179	139,567	652	2	1	24	25	11	980	30,000	10,000	16,028
209	Lexington	3,831	7-14	603	0	424	440	864	185	135,596	732	4	1	23	24	4	985	200,000	17,200	27,703
210	Mansfield	4,006	7-14	520	0			868			719	4	2	18	20	10		48,000	11,504	20,143
211	Marblehead	7,582	5-15	1,060	10			1,316	192	203,485	1,059	3	1	35	36	9	1,297	100,000	18,586	26,499
212	Methuen	7,512	7-14	1,173	107			1,556	180	230,490	1,282	4	2	43	45	12	*1,470	87,000	23,565	32,957
213	Middleboro	6,885	7-14	841	0	624	752	1,376	180	197,100	1,095	3	3	30	39	19	1,400	78,500	19,500	28,545
214	Millbury	4,460	5-15	935	56	431	427	858	b 172½	149,527	673	4	3	20	23	6	977	51,800	10,797	15,662
215	Milton	6,578	5-15	1,237				1,531	184	223,008	1,212	8	4	50	54	8	*1,625	250,000	27,830	36,001
216	Montague	6,150	5-15	1,419	250	628	562	1,190	147	*178,871	1,011	3	1	36	37	9	1,400	100,000	21,000	31,000
217	Needham	4,016	7-14	826	0	416	415	831	191	140,672	737	1	2	26	28	7	1,004	70,000	10,022	24,188
218	North Andover	4,243	5-15	806	7	427	455	882	190	141,930	747	1	4	24	28	8	1,000	67,000	14,830	19,501
219	North Attleboro	7,253	5-15	1,233	0	677	723	1,400	182	214,104	1,176	3	2	34	36	13	1,553	135,000	20,919	31,652

220	Northbridge	7,036	5-15	1,379	0	744	706	1,510	190	245,860	1,294	3		36	37	10	1,774	158,500	19,069	29,103
221	North Brookfield	4,587	5-15	537	100	259	238	497	c180	75,290	.....	5		12	13	2	768	35,000	7,677	11,207
222	Norwood	5,480	5-15	1,356	13	750	740	1,490	*190	*221,857	1,293	5		37	39	7	1,667	*130,000	24,797	36,425
223	Orange	5,520	*7-14	*734	*0	568	605	1,173	182	179,925	998	1		27	28	8	1,300	100,000	15,154	26,419
224	Palmer	7,601	7-14	*1,290	300	650	562	1,212	184½	177,892	964	3		50	53	10	1,225	95,000	17,343	25,346
225	Provincetown	4,247	7 14	574	0	.....	.....	891	190	144,400	700			23	24	6	1,000	75,000	11,009	13,201
226	Randolph	3,983	5-15	609	25	348	364	712	174	105,314	605				21	5	760	60,000	8,458	11,930
227	Reading	4,969	5-15	938	0	565	599	1,164	182	186,421	1,006		3	30	33	8	1,275	108,000	20,755	30,610
228	Rockland	5,227	5-15	1,050	0	578	588	1,166	190	192 227	1,042		5	26	31		1,552	68,000	19,119	25,766
229	Rockport	4,592	7-14	602	0	414	430	844	d177	158,445	774			21	22	10	925	30,000	10,934	16,724
230	Saugus	5,084	5-15	1,246	0	717	778	1,495	184	215,832	1,173	3		34	35	11	1,460	120,000	17,970	26,587
231	South Hadley	4,526	7-14	603	0	467	481	948	e183½	144,495	783	3	2	26	28	6	1,000	58,500	13,528	19,437
232	Spencer	7,027	5-15	1,345	345	621	621	1,242	f184	170,824	886	3	2	32	34	15	1,200	127,600	17,425	26,616
233	Stoneham	6,197	5-15	1,035	0	624	584	1,208	184	188,416	1,024	3		28	29	6	1,275	140,000	16,940	26,209
234	Stoughton	5,442	7-14	741	240	..	....	829	.....	.....	736	1		20	21	8	.....	60,000	12,000	18,364
235	Swampscott	4,548	7-14	492	0	392	434	826	184	126,502	688	5		22	23	6	850	86,300	16,005	24,531
236	Warren	4,417	7-14	525	180	451	501	952	177	123,953	700	3	4	14	18	3	756	46,300	10,921	16,658
237	Wellesley	5,072	7-14	527	402	563	764	1,327	177½	135,959	766	8		37	39	6	980	155,000	24,686	35,020
238	Westboro	5,400	7-14	494	0	389	368	757	190	118,370	623	3	3	15	16	6	780	70,000	9,978	14,567
239	West Springfield	7,105	5-15	1,507	11	920	921	1,841	183	264,376	1,444		5	41	46	12	1,850	136,000	25,654	32,579
240	Whitman	6,155	7-14	773	10	632	633	1,265	185½	210,274	1,141		2	29	31	8	1,367	95,000	18,179	29,527
241	Williamstown	5,013	5-15	810	105	424	391	815	181	121,813	673			25	26	9	900	85,000	13,538	18,901
242	Winchendon	5,001	7-14	784	0	560	563	1,123	180½	159,472	863		3	31	34	12	1,400	*200,000	16,571	24,314
243	Winchester	7,248	7-14	1,073	20	964	927	1,891	195	299,793	1,535		5	45	50	10	1,900	287,600	34 741	53,466
244	Winthrop	6,058	7-14	785	0	650	709	1,359	182	200,746	1,103	3	4	30	34	4	1,375	70,000	24,741	35,604
	MICHIGAN.																				
245	Albion	4,519	5-20	1,487	0	532	563	1,095	180	154,980	861		3	21	24	5	1,060	65,000	13,885	27,155
246	Benton Harbor	6,982	5-20	1,800	11	837	772	1,609	176	228,800	1,300		3	32	35	5	1,626	75,000	23,200	24,000
247	Bessemer	3,911	5-20	1,108	0	430	534	964	200	188,944	.....	2		26	28	5	974	75,000	16,270	26,413
248	Big Rapids	4,686	5-20	1,328	3	479	484	963	192	142,080	740	2		25	26	4	960	45,000	17,845	18 076
249	Cadillac	5,997	5-20	1,967	120	853	905	1,758	178	231,407	1,300	2	0	37	37	5	1,700	85 000	16,240	23,472
250	Charlotte	4,092	5-20	996	19	477	527	1,004	193	151,119	783		0	23	23	7	925	50,000	12,825	16,820
251	Cheboygan	6,489	5-20	2,272	400	747	709	1,456	194	181 284	986	2		25	27	7	1,254	68,000	12,640	29,777
252	Coldwater	6,216	5-20	1,323	0	541	575	1,116	185	173,081	930	1		28	31	4	1,180	100,000	15,370	21,662
253	Delray	4,573	5-20	1,820	150	598	654	1.250	200	230,000	1,150	3		36	39	8	1,300	190,000	21,690	25,398
254	Dowagiac	4,151	5-20	1,108	2	533	572	1,105	195	160,650	870	2			24	3	1,050	75,000	12,271	17,709
255	Grand Haven	4,743	5-20	1,612	150	649	610	1 259	196	195,416	972	2		28	29	4	1,200	75,000	13,241	21,376
256	Hancock	4,050	5-20	1,824	350	588	534	1,122	193	178,909	927			22	25	3	1,024	100,000	14,700	23,966
257	Hillsdale	4,151	5-20	1,080	0	485	500	985	175	137,375	785			21	22	6	1,010	100,000	11,362	18,862
258	Ionia	5,209	5-20	1,530	200	580	633	1,213	198	142,925	729			31	32	4	986	....	15,029	20,402
259	Ludington	7,166	5-20	2,596	449	819	836	1,655	185½	265,457	1,397	3	2	42	44	7	1,711	125,000	22,680	30,842
260	Manistique	4,126	5-20	1,425	250	511	516	1,027	194	158 110	815	2	3	24	27	4	1,186	70,000	15,601	33,808
261	Marine City	3,829	5-20	1,218	300	320	300	620	200	102 400	512	2		15	16	3	750	60,000	5,697	16,502
262	Marshall	4,370	5-20	1,002	100	346	436	782	193	128,566	653	2		22	24	6	988	125,000	12,380	17,339
263	Monroe	5,043	5-20	1,833	400	420	348	768	192	110,208	636			19	21	4	780	38,600	10,765	15,865
264	Mount Clemens	6,576	5-20	2,262	500	600	638	1,238	200	224,200	1,121			28	32	5	1,300	100,000	15,425	27,214

* Statistics of 1903-4.
a Average of all schools.
b High school, 190 days.
c High school, 200 days; eighth and ninth grades, 190 days.
d High school, 191 days.
e High school, 193 days.
f High school, 195 days.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5*—Continued.

	City.	Population, census of 1900.	School census age.	Children of school census age.	Pupils in private and parochial schools.	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils.	Average daily attendance.	Supervising officers	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and supervising officers.	Total expenditure.
						Boys.	Girls.	Total.					Men.	Women.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	MICHIGAN—continued.																			
265	Negaunee	6,035	5-19	2,049	*200	857	822	1,679	200	220,356	1,101	2	1	31	32	6	1,445	$85,000	$21,272	$28,495
266	Niles	4,287	5-20	1,240	0	528	537	1,065	188	143,258	752	2	1	23	24	7	1,015	58,000	12,461	22,333
267	Norway	4,170	5-20	1,760	170	542	530	1,072	182	164,155	859	2	2	21	23	4	873	22,300	13,500	22,615
268	Petoskey	5,295	5-20	1,872	200	560	580	1,120	185	165,394	862	2	2	26	28	5	984	40,000	15,400	16,500
269	St. Joseph	5,155	5-20	1,524	200	516	502	1,018	178	148,630	835	3	2	28	30	3	*1,107	75,000	15,619	21,479
270	South Haven	4,009	5-20	1,090	50	494	521	1,015	180	144,656	702	2	2	20	22	3	970	40,000	10,962	13,961
271	Wyandotte	5,183	4-20	2,268	900	512	513	1,025	194	158,552	802	1	0	30	30	3	1,400	250,000	15,000	18,000
272	Ypsilanti	7,378	.....	1,686	350	515	574	1,089	187	164,747	881	5	3	26	29	4	1,200	70,000	16,788	23,849
	MINNESOTA.																			
273	Albert Lea	4,500	5-21	1,450	0	620	715	1,345	180	200,075	1,112	4	1	30	31	5	1,300	175,000	19,500	29,066
274	Austin	5,474	5-21	1,400	0	583	748	1,331	180	199,658	1,109	2	2	29	31	6	1,350	76,000	16,199	25,270
275	Crookston	5,359	5-21	1,700	50	716	855	1,571	180	213,370	1,185	2	*2	*31	*33	6	1,550	80,000	18,799	42,603
276	Fergus Falls	6,072	6-21	*1,800	25	674	706	1,380	176	202,923	1,152	1	2	29	31	6	1,200	80,000	14,604	29,634
277	Little Falls	5,774	5-21	1,650	300	680	770	1,450	180	216,000	1,200	1	0	31	31	4	1,405	100,000	16,000	23,000
278	Moorhead	3,730	*5-20	*1,000	325	457	410	867	176	110,442	614	2	1	20	21	4	800	40,000	12,886	24,459
279	New Ulm	5,403	5-21	1,500	700	405	380	785	195	118,208	606	1	2	16	18	5	825	55,000	10,820	15,000
280	Owatonna	5,561	5-21	1,800	300	600	604	1,204	176	173,712	987	1	1	28	29	4	1,200	90,000	14,000	17,800
281	Red Wing	7,625	8-16	1,650	200	727	891	1,618	180	226,640	1,270	3	2	40	42	5	1,700	80,000	21,000	30,000
282	Rochester	6,843	5-21	1,600	300	605	579	1,184	180	181,160	1,006	4	0	34	34	6	1,300	110,000	17,138	26,695
283	St. Peter	4,302	.....	.....	70	332	374	706	174	109,019	612	1	1	19	20	3	725	35,000	11,756	13,156
	MISSISSIPPI.																			
284	Biloxi	5,467	5-21	2,880	250	426	588	1,014	180	166,340	938	2	2	17	19	6	1,000	40,000	9,282	10,800
285	Columbus	6,484	5-21	3,500	0	848	1,066	1,914	180	208,440	1,158	2	4	29	33	3	1,875	51,000	12,425	*13,000
286	Greenville	7,642	5-21	3,658	225	699	826	1,525	*180	163,127	915	4	3	30	33	6	1,060	60,000	15,033	57,404
287	Hattiesburg	4,175	5-21	1,404	200	703	775	1,478	158	160,528	1,016	1	2	21	23	4	1,600	100,000	10,456	13,433
288	McComb	4,477	5-21	1,700	200	590	619	1,209	178	144,600	823	5	2	17	19	3	1,200	65,000	10,081	10,500
289	Yazoo City	4,944	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

	MISSOURI.																			
290	Aurora	6,191	6-20	1,454	0	368	848	1,216	160	130,012	856	1		17	21	3	1,200	30,000	7,870	9,782
291	Boonville	4,377	6-20	1,200	100	364	388	752	175	90,250	550	1		16	19	2	600	40,000	9,000	11,000
292	Brookfield	5,484	6-20	1,500	75	000	63	1,240	180	171,000	960	2		18	25	6	1,400	80,000	11,265	15,000
293	Cape Girardeau	4,815	6-20	1,780	* 400	415	502	917	190	110 647	605	2		17	18	3	700	50,000	*9,000	.....
294	Carterville	4,445	6-20	1,313	0	450	471	930	160	104 635	654	2		16	18	3	1,060	40 300	7,140	35,140
295	Chillicothe	6,905	6-20	*1,755	200	711	674	1,385	170	184,518	1,048	3	7	22	29	6	1,488	80,000	12,000	20,500
296	Clinton	5,061	6-20	1,579	0	624	714	1,338	180	178,644	992	1	6	25	31	4	1,700	75 000	14,013	18 033
297	Columbia	5,651	6-20	1,941	.....	716	796	1,512	184	188,436	1,140	1	4	27	31	5	1,642	90,000	15,928	*21,461
298	De Soto	5,611	6-20	2,111	175	.....	...	1,509	180	181,080	1,200	2	3	23	26	6	1,500	86,000	10.722	13.463
299	Fulton	4,883	6-20	1,133	45	387	465	852	180	107,354	671	2	6	14	20	3	920	30.000	8,800	11,738
300	Independence	6,974	6-20	2,348	100	943	995	1,938	180	253,468	1,406	7	3	37	40	6	2,380	242,640	23,828	54,490
301	Kirksville	5,960	6-20	1,733	.....	549	630	1,179	158	147,888	936	2	5	25	30	5	1,200	70,500	10,706	18,490
302	Lexington	4,190	6-20	1,834	0	387	854	1,241	182	100,234	852	1		18	20	...	.....	65,000	14,500	.....
303	Louisiana	5,131	6-21	1,600	.....	498	518	1,016	158	124,823	794	7	0	18	18	...	1,246	60,000	10,543	13,880
304	Macon	4,068	6-20	1,172	100	455	487	942	176	119,328	676	2		20	22	3	981	78,000	9,240	12,165
305	Marshall	5,060	6-20	1,588	200	655	724	1,379	174	163,284	954	1		22	29	4	1,200	75,000	14,983	18,460
306	Maryville	4,577	6-20	1,250	40	521	532	1,053	178	147,600	829	1	2	25	27	5	1,200	100,000	13,000	18,960
307	Mexico	5,099	6-20	1,721	150	400	450	850	174	164,802	.....	5	6	22	28	3	1,200	40,000	14,397	18,228
308	Nevada	7,401	6-20	2,424	200	866	891	1,757	172	245,960	1,430	2		36	36	6	1,575	75,000	16,727	23,649
309	Poplar Bluff	4,321	6-20	1,725	0	688	749	1,437	180	144,000	800	3	3	20	23	5	1,400	58,000	11,223	15,000
310	Rich Hill	4,053	.....	1,200	300	400	500	900	180	135,270	751	1	5	16	21	3	*1,200	22,000	6,500	8,381
311	Trenton	5,395	6-20	1,728	50	748	752	1,500	180	183,089	1,018	2	*6	28	29	4	1,447	70,000	15,077	20,076
312	Warrensburg	4,724	6-20	1,494	300	632	633	1,065	179	136,804	775	3	6	21	27	7	1,200	60,000	13,136	14,750
	MONTANA.																			
313	Missoula	4,366	.....	.....	.....	...	...	.....	.....	.....	.....	...	...	...	...	...	.....	.....	.....	.....
	NEBRASKA.																			
314	Fremont*	7,241	5-21	2,892	.....	892	926	1,818	176	244,371	1,358	2		42	43	10	1,876	132,000	21,055	31,040
315	Grand Island	7,554	5-21	2,660	475	781	849	1,630	178	258,112	1,450	3		37	40	5	1,805	132,000	21,844	32,921
316	Kearney	5,034	5-21	2,041	0	696	753	1,449	178	234,604	1,318	2		29	31	6	1,450	155,700	14,729	22,449
317	Nebraska City	7,380	5-21	2,354	0	706	784	1,490	176	199,484	1,139	1		33	34	7	1,550	70,000	16,870	26,563
318	Norfolk	5,883	5-21	1,772	*150	762	796	1,558	180	247,500	1,370	2	1	23	24	5	*1,200	74,300	12,645	19,502
319	Plattsmouth	4,964	5-21	1,784	200	591	618	1,209	175	184,746	941	1	0	26	26	8	1,300	60,000	14,178	22,313
320	York	5,132	5-21	*1,550	20	661	624	1,185	177	172,451	974	1		21	24	4	1,060	70,100	10,863	17,000
	NEVADA.																			
321	Reno*	4,500	6-18	1,528	120	787	844	1,631	180	181,608	906	2		26	28	4	.....	90,000	22,340	28,583
	NEW HAMPSHIRE.																			
322	Claremont	6,498	5 16	1,437	300	516	514	1,030	b 146	125,175	856	3		23	24	12	*1,160	50.000	10,324	14,125
323	Exeter*	4,022	5-16	883	29	441	413	854	176	129,184	734	2		15	17	10	845	29,000	9,206	13,841
324	Franklin	5,849	6-16	1,124	509	434	407	841	169	120,159	657	3	2	23	25	7	850	79,800	10,906	17,700
325	Somersworth	7,023	5-16	1,458	530	480	539	990	*170	*119,000	*b 100	2	2	23	25	6	1,500	100,000	19,120	*19,500

*Statistics of 1903-4. a Colored schools, 160 days. b Approximately.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5*—Continued.

	City.	Population, census of 1900.	School census age	Children of school census age.	Pupils in private and parochial schools.	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils.	Average daily attendance.	Supervising officers.	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and supervising officers.	Total expenditure.
						Boys.	Girls.	Total.					Men.	Women.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	NEW JERSEY.																			
326	Asbury Park	4,148	..	...	...	402	392	794	173	96,855	565	3	1	24	25	2	717	$100,000	$19,398	$31,809
327	Boonton	3,801	5-21	600	200	300	300	600	198	98 125	528	1	1	15	16	3	600	35,500	10,500	11,500
328	Bordentown*	4,110	5-20	950	150	265	272	537	187	89,760	480	1	1	14	15	2	560	24,000	9,000	11,000
329	Burlington*	7,302	..	..	..	553	548	1,101	184	129,896	705	1	1	23	24	6	1,242	65,000	11,620	20,125
330	Dover	5,938	..	...	...	729	724	1,453	191	208,785	1,083	1	3	28	31	4	1,342	56,000	18,375	25,000
331	Englewood	6,253	..	...	...	608	621	1,229	184	162,214	893	5	0	41	41	5	1.184	125,000	31,890	47,324
332	Gloucester City	6,840	4-20	2,000	600	584	507	1,091	194	122,026	629	1	0	19	19	5	*848	25,000	12,450	18,839
333	Irvington	5,255	..	...	125	732	694	1,426	191	196,096	1,021	2	1	31	32	5	1,427	120,000	21,606	35,390
334	Lambertville*	4,637	5-18	...	230	343	385	728	190	90,989	526	1	0	15	15	3	660	16,800	7,475	12,361
335	Madison	3,754	5-18	*800	175	278	275	553	192	75,375	393	2	0	14	14	2	510	50,000	10,940	17,764
336	Newton	4,376	4-20	..	25	391	452	843	185	108,182	585	2	1	17	18	1	900	90,000	10,625	*15,000
337	North Plainfield	5,009	4-20	..	...	567	604	1,171	182	152,072	836	1	3	33	36	3	1,108	140,000	23,550	*37,425
338	Princeton	3,899	4-20	*900	170	342	380	722	195	93,229	489	1	4	15	19	3	710	60,000	10,575	17,500
339	Redbank	5,428	.	..	300	586	534	1,120	189	145,719	771	5	1	27	28	4	1,125	130,000	17,500	*26,122
340	Rutherford	4,411	4-20	1,246	10	605	641	1,246	189	182,092	960	1	4	29	33	3	1,300	100,000	15,970	33 000
341	Salem	5,811	.	..	..	550	800	1,350	200	*175,105	*917	2	1	37	38	5	1,400	100,000	*13,555	28,650
342	Somerville	4,843	4-20	1,200	16	510	510	1,020	189	138 946	749	1	1	23	24	3	960	80,000	14,700	22,500
343	South Amboy	6,349	4-20	1,696	636	350	351	701	187	96,605	518	3	0	16	16	2	720	55,480	10,650	15,230
344	South Orange	4,608	4-20	1,500	400	484	492	976	180	134,830	715	1	5	30	35	5	945	154,000	28,028	63,173
345	Summit	5,302	..	...	350	449	380	829	184	103,745	563	3	0	21	21	3	*636	100,000	18,480	23,672
346	Vineland	4,370	5-20	*2,100	20	1,068	1,038	2,106	176	268,297	1,532	1	2	43	45	19	2,096	86,500	20,314	37,704
347	West New York	5,267	4-20	2,000	400	685	633	1,318	198	174,957	881	1	0	23	23	7	1,200	75,000	14,590	25,000
348	West Orange	6,889	4-20	2,194	684	784	726	1,510	189	198,103	1,037	3	3	41	44	7	*1,800	155,000	28,072	61,964
349	Woodbury	4,087	5-20	...	...	451	442	893	184	116,920	630	2	1	21	22	5	959	33,000	12,075	18,000
	NEW MEXICO.																			
350	Albuquerque	6,238	5-21	2,719	300	862	925	1,787	172	210,729	1,225	2	4	30	34	5	1,600	172,850	17,449	99,812
351	Raton	3,540	5-21	1,055	50	502	403	905	176	129,380	735	1	2	15	17	2	800	60,000	9,000	12,000
352	Santa Fe	5,603	5-21	2,012	730	350	240	590	173	60,702	351	1	2	8	10	5	450	65,000	6,828	9,071

	NEW YORK.																			
353	Albion	4,477	5-18	1,225	250	668	440	1,128	189	127,215	673	1	2	25	27	5	1,000	32,300	13,731	27,892
354	Ballston Spa	3,923	5-18	800	0	305	490	845	200	122,787	614	3		21	22	3	950	46,914	10,175	18 003
355	Bath	4,994	5-18	697	0	334	390	724	183	114,067	623	0		17	18	2	700	32,600	9,000	15,000
356	Canandaigua*	6,151	5-18	1,394	350	408	613	1,011	187	108,037	883	2		31	35	4	1,100	132,379	16,917	26,335
357	Catskill	5,484	5-18	1,036	300	430	424	863	193	127 431	660	2	3	26	29	4	1,000	70,602	15,198	23,693
358	Fredonia	4,127	5-18	1,009	.....	335	320	655	183	79,230	433	0	0	17	17	3	526	27,435	7,803	11,545
359	Fulton	5,281	5-18	1,503	0	573	925	1,798	186	275,522	1,481	2	2	45	47	7	1,872	120,000	25,187	32,274
360	Green Island	4,770	5-18	1,075	1	410	434	844	191	115 625	605	*		15	16	3	837	43,000	9,035	18,910
361	Haverstraw	5,935	5-18	1,492	250	543	621	1,164	196	160,645	820		0	23	23	1	1,000	50,000	13,400	19,125
362	Herkimer	5,555	5-18	1,371	0	675	639	1,314	194	194,004	1,000	5		30	31	2	1,297	97,600	16,215	37,534
363	Hoosick Falls	5,671	5-18	1,180	303	450	465	915	175	126,305	721		3	24	27	4	1,200	69,250	15,225	24,267
364	Ilion	5,138	5-18	1,121	0	587	622	1,209	187	184,943	989	4	0	27	27	3	1,100	70,519	17,657	24,041
365	Lancaster	3,750	5-18	944	328	314	302	616	193	81 231	421		1	14	15	2	811	55,285	7,051	11,197
366	Lyons	4,300	5-18	1,008	0	418	465	883	187	129,978	694	3		18	19		900	71,850	11,082	17,211
367	Malone	5,035	8-16	1,121	186	690	738	1,428	179	178,990	1,000	2	3	32	35	11	.....	108,000	18,693	28,483
368	Mamaroneck	4,722	5-18	896	83	404	373	777	195	109,864	578	2		20	21	5	800	94,200	14,310	29,573
369	Matteawan	5,807	5-18	852	97	363	430	793	185	106,228	574		0	15	15		700	32,000	9,442	13,424
370	Mechanicsville	4,695	5-18	1,540	0	625	624	1,249	186	184,734	972	3		27	28	3	1,200	78,731	14,100	21,200
371	Medina	4,716	5-18	1,254	177	488	466	954	189	139,947	721	1		27	28	5	1,012	60,634	14,961	23,035
372	Newark	4,578	5-18	*723	0	394	406	800	190	112,463	592			21	22		750	46,000	10,802	18,632
373	North Tarrytown	4,241	5-18	965	290	251	260	511	191	75,052	392	0		13	14		600	81,000	9,400	15 322
374	Norwich	5,756	5-18	1,300	25	492	885	1,377	184	203,274	1,108			34	35	5	*1,250	118,800	14,946	30, 402
375	Nyack	4,275	5-18	1,440	175	580	638	1,217	186	172,719	929	3	2	22	24	2	1,141	82,072	17,750	25, 381
376	Oneida	6,304	5-21	1,750	0	686	812	1,498	185	195,823	1,059	1	2	33	36	4	1,500	114,350	18 595	37, 247
377	Oneonta	7,147	5-18	1,130	200	590	682	1,272	185	168,602	887			26	27	3	1,300	69,000	15,825	21,000
378	Ossining	7,930	5-18	*1,403	251	530	580	1,108	184	173,507	935	1	0	31	31	2	1,150	77,300	22,200	*35,846
379	Owego	5,039	5-18	810	85	398	362	760	183	117,125	603	1	2	23	25	5	900	38,900	13 136	20,618
380	Penn Yan	4,650	5-18	850	123	378	385	763	191	120,321	631	8	2	19	21	*5	841	60,000	.....	17,000
381	Port Chester	7,440	5-18	2,093	326	940	905	1,845	188	270,304	1,438	5		38	39	4	1,754	123,200	33 444	42,410
382	Rensselaer	7,466	5-18	2,321	579	858	904	1,762	182	229,266	1,266	5		39	40	3	1,074	108,500	25,570	42,806
383	Salamanca	4,251	5-18	1,279	302	440	460	900	191	132,529	684	3	2	25	27	4	960	61,750	14,710	30,265
384	Sandy Hill	4,473	5-18	1,091	175	505	584	1,089	188	148,900	827	1	1	27	28	5	989	72,210	15,270	22,905
385	Seneca Falls	6,519	5-18	1,175	383	404	373	777	193	118,027	612	2	0	23	23	4	1,000	73,631	11,480	15,035
386	Tarrytown	4,770	5-21	877	72	.....	.....	765	200	*101,010	*552	4	2	21	23	3	900	141,000	*20,000	*30,000
387	Tonawanda	7,421	5-18	2,011	220	858	824	1,682	193	253,323	1,313	3		40	41	5	1,750	115,800	20 374	48,921
388	Waterloo	4,256	*5-18	*677	185	340	371	711	188	76,516	407	5		18	19	4	.....	71,191	10,958	21,444
389	Waverly	4,465	5-18	961	0	478	547	1,025	191	154,104	806	2		24	25	5	1,010	67,830	13,740	23,864
390	Whitehall	4,377	5-18	1,150	0	400	475	875	191	132,936	696	1	0	25	25	4	950	45,750	10,260	14,575
	NORTH CAROLINA.																			
391	Elizabeth City*	6,348	6-21	2,410	300	210	215	425	165	44,580	270	2				3	800	15,000	4,500	5,000
392	Fayetteville*	4,070	6-21	2,232	.....	596	678	1,274	140	133,280	952	3	0	24	33	3	1,400	20,000	7,625	.....
393	Gastonia	4,610	6-21	1,805	0	626	625	1,251	177	115,758	654			18	19	7	900	15,000	7,000	7,000
394	Goldsboro*	5,877	6-21	0	.....	.....	.....	1,485	180	.....	.....	1	3	30	33	5	.....	75,000	16,000	.....
395	High Point	4,163	6-21	2,517	0	620	625	1,245	160	163,360	1,021	2	2	17	19	2	1,250	55,000	8,039	.....
396	Kinston	4,106	6-21	1,650	60	572	618	1,190	155	111,627	719		4		10	3	1,000	30,000	7,118	8,250
397	Salisbury*	6,277	6-21	2,022	100	520	662	1,182	172	158,240	920	3	3	21	24	3	1,200	50,000	10,000	12,650
398	Washington	4,842	6-21	1,888	65	502	546	1,048	178	109,578	622		3	15	18	3	990	15,000	7,550	10,312

* Statistics of 1903-4.

a From State report, 1904.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904-5*—Continued.

	City.	Population, census of 1900.	School census age.	Children of school census age	Pupils in private and parochial schools	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days attendance of all pupils	Average daily attendance.	Supervising officers.	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and superintending officers.	Total expenditure.
						Boys.	Girls.	Total.					Men	Women.	Total					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	OHIO.																			
399	Ashland	4,087	6-21	1,143	0	449	477	926	180	129,420	719	1	3	17	20	6	900	$70,000	$10,200	$15,000
400	Barberton	4,354	6-21	1,532	....	555	561	1 116	173	130,683	871	2	2	27	29	8	1,300	95,000	15,487	.....
401	Bellefontaine	6,049	6-21	2,139	120	761	757	1,518	174	217,481	1 250	1	4	35	39	5	1,562	100,000	18,660	26,864
402	Bellevue	4,101	6-21	1,146	130	*420	*425	*845	*180	*108,550	*603	1	2	22	24	4	1,000	70,000	11,000	14,000
403	Bowling Green	5,067	6-21	1,331	0	504	582	1,186	173	178,709	1,033	2	2	28	30	4	1,400	90,000	26,105	.....
404	Bridgeport*	3,963	6-21	1,520	125	501	546	1 047	177	137,529	777	2	5	16	21	4	900	70,000	11,805	16,456
405	Bucyrus	6 500	6-21	2 211	150	645	671	1,316	172	221,612	1,293	1	6	23	29	3	1,500	108,000	13,698	18,995
406	Canal Dover	5,422	6-21	1,636	150	489	470	959	180	148,320	824	1	4	26	30	3	1,100	100,000	13,920	19,312
407	Circleville	6,991	6-21	1,947	160	621	644	1,265	184	180,464	981	3	2	34	36	4	1,500	140,000	20,015	26,782
408	Conneaut	7,133	6-21	1,800	200	725	671	1,396	187	235,059	1 257	1	5	31	36	5	*1,600	100,000	18 000	27,000
409	Coshocton	6,473	6-21	2 150	0	728	813	1,541	175	203,350	1,162	3	6	29	35	5	1,500	81,000	16,970	27,000
410	Defiance	7 579	6-21	2,411	389	650	694	1,344	185	188,912	1,021	1	2	30	32	5	1,400	120,000	14,020	25,735
411	Delaware	7 940	6-21	2,594	260	790	864	1,654	185	231,905	1,254	2	3	38	41	5	1,800	205,000	21,129	70,464
412	Delphos	4 517	6-21	1,600	300	350	420	770	1 177	132,750	750	1	4	17	21	4	800	75,000	10,000	12,500
413	Dennison	3,763	6-21	1,100	300	400	420	820	180	126,000	700	2	4	17	21	3	820	40,000	10,000	15,000
414	Fostoria	7 730	6-21	2,500	225	800	795	1,595	175	227,500	1 300	3	6	32	38	6	1,800	110,000	18,000	30,000
415	Galion	7,282	6-21	2 149	250	690	689	1,379	180	218,556	1,214	3	6	27	33	4	*1,300	80,000	18,792	30,000
416	Gallipolis	5,432	6 21	1,735	0	600	560	1,160	176	148,192	842	3	5	25	31	8	1 200	30,000	15,052	18,562
417	Glenville	5,588	6-21	1,600	200	585	620	1,205	191	190 000	1,020	4	1	30	31	3	1,275	105,000	20,500	29,500
418	Greenfield*	3,979	6-21	1,236	0	459	421	880	176	112,816	641	1	3	20	23	2	1,020	60,000	9,830	11,886
419	Greenville	5,501	*6-21	*1,710	65	634	643	1,277	175	189,350	1,082	3	6	33	39	5	1,329	225,000	22,790	50,879
420	Hillsboro	4,535	6-21	1,152	0	443	504	947	180	138,420	769	2	5	20	25	3	1,000	80,000	15,000	19,500
421	Jackson	4,672	6-21	1,535	0	502	600	1,102	180	178,200	990	1	3	25	28	6	1,300	60,000	11,635	*13,227
422	Kent	4,541	6-21	1,145	0	548	583	1,131	185	159,915	859	1	6	18	24	3	1,125	75,000	12,925	15,235
423	Kenton	6,852	6-21	2,300	169	655	692	1,347	172	187,652	1,001	1	4	29	33	6	1,325	100,000	16,206	19,506
424	Martins Ferry	7,760	6-21	2,515	*125	814	830	1,644	176	231,610	1,318	2	5	31	38	4	1,800	225,000	17,951	39,705
425	Miamisburg	3,941	6-21	1,331	60	350	434	784	176	116,708	663	1	2	20	22	4	812	40 200	10,161	26,873
426	Mount Vernon	6,633	6-21	*1,925	*250	641	789	1,430	186	257,962	1,307	4	2	32	34	7	1,650	175,000	a20,500	a 30,500
427	Nelsonville	5,421	6-21	1,837	0	689	730	1,419	180	219,420	1,219	1	4	26	30	3	1,450	75,000	13,101	16,078
428	Newburg	5,909	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
429	New Philadelphia	6,213	6-21	2,042	0	807	822	1,629	180	264,960	1,472	1	4	35	39	4	1,766	120,000	18,565	23,675
430	Niles	7,468	6-21	2,452	180	691	714	1,405	176	207,082	1.177	1	4	29	33	10	1,630	125,000	17,180	46,064

431	Norwalk	7,074	6-21	2,079	400	573	620	1,193	183	182,817	999	1	4	27	31	5	1,300	120,000	15,943	*22,607
432	Norwood*	6,490	6-21	2,120	335	609	624	b1,233	190	185,920	976	1	5	34	37	5	1,850	125,000	25,068	28,600
433	Oberlin*	4,082	6-21	1,080	.....	41	447	861	182	134,316	738	1	1	20	21	4	1,100	62,000	11,714	.....
434	Painesville	5,024	6-21	1,382	150	543	595	1,138	184	171,468	932	3	3	24	27	5	1,170	112 000	17,267	25,063
435	Pomeroy	4,630	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
436	Ravenna	4,003	6-21	1,087	.....	405	428	833	.....	.....	679	1	5	14	19	3	870	65,000	11,646	.....
437	St. Marys	5,359	6-21	1,467	150	507	609	1,116	180	167,940	932	2	2	24	26	4	1,200	80 000	11,775	12,775
438	Salem	7,592	6-21	2,064	140	708	739	1,447	176	219,296	1,246	3	2	32	34	4	1,595	128 000	22,000	33,627
439	Shelby	4,065	6-21	1,180	102	432	424	856	176	130,788	743	1	2	22	24	4	956	75,000	12,338	.....
440	Sidney	5,668	6-21	*1,902	250	603	586	1,189	180	175,680	976	1	5	30	35	5	1,800	80 000	18,000	*22,000
441	Troy	5,881	6-21	1,535	60	526	475	1,001	188	163,671	871	4	3	24	27	3	1,150	220,000	19,201	48,000
442	Uhrichsville	4,582	6-21	1,337	0	320	476	996	180	139,680	776	1	4	22	26	3	1,190	120,000	11,245	16,245
443	Urbana	6,808	6-21	1,862	225	491	516	1,007	182	160,688	884	3	5	20	25	4	1,200	107 500	17,158	26,905
444	Vanwert	6,422	6-21	2,126	0	812	833	1,645	180	230,178	1,279	1	3	30	30	4	1,800	450,000	17,268	23,481
445	Wapakoneta	3,915	8-14	700	150	420	386	806	174	107,208	617	3	3	20	23	2	850	.....	12,680	17,916
446	Washington C. H.	5,751	6-21	1,532	0	628	635	1,263	176	191,808	1,033	1	3	31	34	5	1,320	70,000	16,775	30,000
447	Wellsville	6,146	6-21	2,000	125	687	685	1,372	178	21 008	1,233	1	0	27	27	4	1,420	125,000	14,300	17,587
448	Wooster	6,063	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	OREGON.																			
449	Baker City	6,663	4-20	2,047	160	377	722	1,650	175	197,181	1,124	2	2	34	36	5	1,512	98,000	22,667	27,093
450	Pendleton	4,406	4-20	1,629	160	586	606	1,202	174	169,240	972	1	1	26	27	5	1,292	300,000	17,450	22,650
451	Salem	4,258	4-20	1,900	300	871	923	1,794	190	247,680	1,376	6	7	35	42	5	1,680	500,000	26,000	33,125
	PENNSYLVANIA.																			
452	Archbald	5,396	6-16	1,232	0	526	674	1,198	180	177,120	984	1	5	16	21	5	1,100	32,500	0,490	15,163
453	Ashland	6,428	6-21	2,000	74	600	675	1,275	180	181,200	1,007	1	2	23	26	4	1,628	60,300	11,665	18,530
454	Ashley	4,046	6-21	1,000	20	425	515	940	178	138,640	780	1	1	21	22	2	920	50,000	10,000	11,250
455	Bangor	4,106	6-16	*925	0	456	517	973	180	143,972	794	0	0	12	21	4	1,200	56,000	9,637	15,343
456	Bellefonte	4,216	6-16	920	165	336	420	756	180	99,000	550	1	2	15	18		800	75,000	12,670	21,000
457	Berwick*	3,916	8-16	800	0	420	570	990	180	151,200	840	0	5	18	23		720	60,000	8,025	10,000
458	Bethlehem	7,293	6-16	2,000	250	880	841	1,721	197	253,145	1,285	1	13	33	45	6	1,967	195,745	25,913	44,303
459	Blakeslee	3,915	*6-16	*608	.....	.....	.....	725	180	102,600	570	1	1	.....	16	4	790	26,148	5,990	11,047
460	Bloomsburg*	6,170	6-21	1,300	25	700	585	1,185	180	.....	.....	1	6	25	31		1,200	95,000	12,816	20,000
461	Bristol	7,104	6-16	1,250	250	525	598	1,123	200	187,000	788	1	0	22	22	4	1,129	90,000	11,466	20,547
462	Carnegie	7,330	6-16	2,500	750	760	745	1,505	c180	c 206,352	1,138	2	2	34	36	3	1,800	148,768	22,989	53,062
463	Catasauqua	3,963	6-16	700	33	321	346	667	200	113,284	567	1	2	12	14	2	680	60,000	8,108	12,595
464	Charleroi*	5,930	6-16	1,600	0	660	804	1,464	180	205,308	1,141	3	3	26	29	3	1,200		13,905	20,466
465	Clearfield	5,081	6-16	1,600	225	570	784	1,354	160	187,642	1,012	1	6	26	32	5	*1,500	130,750	17,317	22,313
466	Coatesville	5,721	6-16	1,400	0	760	833	1,593	190	266,868	1,481	4	1	30	31	4	1,600	100,000	16,755	26,000
467	Connellsville	7,100	6-16	1,600	200	823	837	1,660	180	273,480	1,130	1	2	29	31	4	1,200	100,000	17,457	23,905
468	Conshohocken	5,762	6-21	1,500	400	441	425	866	200	142,600	713	3	1	19	20		850	45,000	10,372	18,563
469	Corry d	5,309	.....	.....	.....	578	600	1,178	180	c 163,440	908	1	1	26	27	.....	.....	.....	10,932	23,136
470	Dickson City d	4,948	.....	.....	.....	400	478	878	180	c 102,960	572	1	3	15	18	.....	.....	.....	7,602	15,036
471	Edwardsville	5,165	6-21	d 1,400	.....	.....	.....	1,100	180	c 162,000	c900	1	1	18	19	4	1,100	40,000	8,500	10,500
472	Etna d	5,384	.....	.....	.....	391	380	771	180	c 107,460	597	1	1	15	16	.....	.....	.....	9,340	15,568
473	Forest City d	4,279	.....	.....	.....	476	486	962	180	c 116,460	647	1	0	13	13	.....	.....	.....	5,221	9,393
474	Franklin	7,317	6-21	2,000	170	756	810	1,566	180	230,760	1,282	1	2	37	39	7	1,840	203,000	24,136	38,594

* Statistics of 1903–4.
* Approximately.
b High school enrollment not included.
c High school, 200 days.
d Statistics from State report, 1904

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5*—Continued.

	City.	Population, census of 1900.	School census age.	Children of school census age.	Pupils in private and parochial schools.	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils.	Average daily attendance.	Supervising officers.	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools	Value of public property used for school purposes.	Salaries of teachers and supervising officers.	Total expenditure.
						Boys.	Girls.	Total.					Men.	Women.	Total					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	PENNSYLVANIA—continued.																			
475	Freeland[a]	5,254				558	524	1,082	180	[b] 146,340	813	1	8	15	18				$7,057	$11,568
476	Gilberton	4,373	6-16	1,110	0	334	543	877	180	[b] 102,600	[a] 570	0	3	18	21	4	720	$28,500	8,860	14,652
477	Greensburg	6,508	6-21	2,000	335	820	842	1,662	180	224,919	1,243	3	3	29	32	4	1,500	275,000	21,870	63,231
478	Greenville	4,814	6-16		300	556	586	1,142	180	171,000	950	3	4	26	30	3	1,200	125,000	16,000	24,000
479	Hanover	5,302	6-16	1,500	200	475	525	1,000	180	162,000	900	1	4	19	23	4	1,050	85,000	11,000	16,000
480	Huntingdon	6,053	6-16	1,210	15	598	617	1,215	180	188,100	1,045	1	4	25	29	3	1,350	72,000	13,905	17,568
481	Indiana	4,142	6-16	* 900	0	460	490	950	160	136,000	855	1	3	14	17	2	1,000	30,000	8,000	11,000
482	Jeannette	5,965	6-16	1,165	283	676	621	1,297	180	171,000	950	1	1	23	24	3	1,500	75,000	14,290	20,178
483	Johnsonburg	3,894	6-21	1,100	20	418	461	879	160	117,812	736	1	1	20	21	3	875	35,000	8,400	12,400
484	Kane	5,296	6-16	1,200	200	550	675	1,225	180	171,000	950	0	2	26	28	4	1,150	[b] 75,000	25,000	
485	Kingston	3,848	8-21		100	406	470	876	177	109,032	616	1	1	14	15	3	* 776	50,000	8,806	16,206
486	Kittanning	3,902			* 0	409	449	858	180	112,320	624	1	6	17	23	1	900	60,000	13,080	18,000
487	Lansford	4,898	6-21	1,200	186	400	600	1,000	180	158,400	880	1	4	19	23	4	1,380	35,000	10,380	18,000
488	Latrobe*	4,614	6-16		416	468	406	872	178	123,968	713	1	2	23	25	3	1,155	70,000	14,675	18,599
489	Lehighton	4,629			250	506	515	1,021	180	147,553	820	3	5	16	21	3	1,100	100,000	9,000	[b] 16,000
490	Lewistown*	4,451				761	753	1,514	180	109,620	1,109	1	4	25	29	4		100,000	13,468	21,921
491	Lock Haven	7,210	6-21	1,500	200	675	681	1,356	160	108,160	1,051	1	5	25	30	4	1,600	113,000	12,157	22,746
492	Luzerne	3,817	6-16	898	125	360	411	771	180	93,060	517	1	1	11	12	2	575	30,000	6,215	9,000
493	McKees Rocks	6,352			900	620	624	1,244	* 200	* 140,000	* 700	1	1	21	22	4	1,200	102,500	12,924	25,356
494	Mauch Chunk*	4,029	6-16	650	150	287	314	601	200	88,200	441	1	3	12	15	2		56,000	7,640	10,500
495	Middletown	5,648	6-16	1,286	0	628	575	1,203	180	150,300	835	1	6	20	26	6	1,900	60,000	10,945	17,168
496	Millvale	6,736	6-16	1,501	734	474	430	904	200	148,740	743	2	1	19	20	3	920	90,000	11,130	15,951
497	Melton	6,175	6-16	1,148	0	585	613	1,198	180	165,060	917	1	8	18	26	5	1,485	90,000	11,780	30,121
498	Minersville	4,815	6-21	1,500	100	531	525	1,056	180	146,823	816	1	3	15	18	3	1,050	75,000	8,985	15,753
499	Monongahela	5,471	6-16			650	659	1,309	180	168,300	935	1	2	23	25	3	1,350	75,000	15,658	17,158
500	Mount Pleasant	4,745	6-16	1,654	632	526	496	1,022	170	130,900	770	2	1	23	24	3	1,080	75,100	12,185	15,385
501	New Brighton[a]	6,820				679	700	1,379	180	[b] 189,000	1,050	1	3	32	35	4			14,211	41,997
502	New Kensington	4,985	8-16	900	20	450	550	1,000	180	144,000	800	2	0	22	22	3	1,000	75,000	11,000	20,000
503	North Braddock[a]	6,535				876	865	1,741	180	[b] 233,140	1,296	1	2	35	37				18,603	49,518
504	Old Forge[a]	5,630				623	728	1,351	180	[b] 151,200	840	0	2	19	21				9,082	14,825
505	Olyphant	6,180	6-16	1,500	300	565	583	1,148	180	136,980	761	1	1	20	21	6	1,200	55,000	10,465	19,241
506	Punxsutawney	4,375	6-21	1,300	0	876	890	1,166	160	151,360	946	1	1	23	24	3	1,200	40,000	10,265	17,649

507	Rankin	3,775	*6-16	*711	*94	416	486	902	190	116,495	585	4	0	19	19	2	650	110,000	12,019	22,833
508	Renovo	4,082	6-16	1,000	500	340	338	678	160	97,600	610	1		16	17	3	900	46,000	7,480	14,312
509	Rochester	4,888	6-16	850		308	468	866	180	129,800	721	2	2	23	26	3	1,000	160,000	14,816	26,702
510	St. Clair[a]	4,038				443	460	906	180	[d] 114,000	637			13	16				6,411	10,546
511	St. Marys	4,295	6-16	1,100	500	225	215	440	160	33,440	209	1	2	10	12	2	500	20,000	6,500	*8,500
512	Sayre	5,243	6-16	1,200	0	669	698	1,437	180	167,200	1,040	2	2	27	20	5	1,400	65,000	15,000	17,500
513	Scottdale	4,261	6-16	1,100	250	430	492	931	180	138,000	767	2	2	18	20	3	000	45,000	11,356	16,408
514	Sharpsburg	6,842	*6-21	*1,500		* 490	*530	*1,020	*180	[d] 138,500	a 770		*	*20	*21	*3	*1,100	*75,000	*11,700	a 22,598
515	Tamaqua	7,267	6-21	2,000	0	855	855	1,710	200	200,000	1,300	2	2	30	32	5	1,450	120,000	16,167	30,000
516	Tarentum	5,472	6-16	1,624	91	690	685	1,375	180	182,520	1,014	2	3	27	30	4	1,500	125,000	18,050	29,147
517	Taylor	4,215	6-16	1,600	40	814	725	1,539	190	185,250	975	1	3	10	22	8	1,500	65,000	12,744	19,324
518	Towanda	4,663	6-16	*1,000	300	393	400	793	180	109,500	592	1	2	18	20	3	.* 800	54,000	9,731	14,850
519	Tyrone	5,847	6-21	1,560	140	711	724	1,435	180	208,110	1,156	2	b	24	30	3	1,350	8,000	16,032	26,322
520	Uniontown	7,344	6-16	1,800	40	845	861	1,706	150	282,240	1,568	1	0	40	40	4	1,520	135,000	19,239	34,234
521	Waynesboro	5,396	6-21	1,550	25	592	620	1,212	170	171,870	1,011	1	6	23	29	4	1,550	53,000	12,328	18,160
522	West Pittston	5,846	6-16	1,080	20	583	657	1,240	180	173,340	963	3	0	25	25	4	1,275	87,000	12,300	19,349
523	Wilmerding	4,179	6-16	780		449	452	901	200	144,400	722	1	0	20	20	3	840	82,000	12,982	38,017
	RHODE ISLAND.																			
524	Bristol	6,901	5-15	1,520	73	577	543	1,120	200	176,600	883	2		25	28	6	1,152	102,000	14,907	19,745
525	Burrillville	6,317	5-15	1,463	13	702	715	1,417	180	181,975	1,005	1		27	29	11	1,325	78,000	14,452	23,177
526	Coventry	5,279	5-15	1,330	321	412	398	810	180	77,272	434	1		14	19	13	909	26,938	6,704	9,028
527	Johnston	4,305	5-15	1,184	8	428	390	818	190	123,020	658	3	0	23	23	12	990	44,428	10,100	19,578
528	North Kingstown	4,194	7-15	867	0	330	389	719	174	126,846	729	1		18	24	13	909	33,409	14,728	17,496
529	South Kingstown[e]	4,972	5-15	1,032	37	660	692	1,352	180	[b] 127,980	711	1		43	44				11,200	21,502
530	Warren	5,108	7-15	1,050	210	437	423	860	197	[b] 112,093	569	3		20	21	7	873	60,500	11,162	18,399
531	Westerly	7,541	6-15	1,531	17	814	792	1,606	180	232,772	1,292	4		45	48	13	1,726	202,000	27,585	52,760
	SOUTH CAROLINA.																			
532	Abbeville	3,766	6-21	1,600	*25	668	750	1,318	175	[d] 151,375	[d] 865	1		18	23	5	1,325	18,000	5,473	9,000
533	Anderson	5,498	6-21	2,200	0	899	897	1,796	185	337,875	1,275	2	6	26	31	4	1,750	58,000	14,504	17,854
534	Beaufort[g]	4,110			25	260	331	591	178	97,920	544	2				3				
535	Chester	4,075			50	490	532	1,022	180	165,880	808	2	6	15	21	3	1,000	40,000	7,615	9,000
536	Florence	4,647			75	416	645	961	180	[d] 151,020	839	2		17	19	3	1,200	25,000	8,000	16,000
537	Gaffney*	3,937	6-21	800		357	429	786	180	120,000	700	3	5	13	16	4		[d] 8,100		
538	Georgetown*/	4,138			75	200	167	367	175	43,750	250	0							3,877	
539	Greenwood	4,824	6-21	1,800	250	484	575	1,059	176	123,232	700	1		15	17	4	1,000	27,500	7,041	8,546
540	Laurens	4,029	6-21	1,000	200	295	399	694	171	81,881	479	1	2	13	15	2	700	18,850	5,783	6,483
541	Newberry	4,607			*100	434	579	[d] 1,013	[d] 180	[d] 152,120	[d] 844	*1	[d] 2	[d] 17	[d] 19	*3	*1,100	*18,000	*5,300	*6,500
542	Orangeburg	4,455	6-21	1,525	200	618	707	1,325	200	220,000	1,100	1			22	3	1,200	50,000	9,872	10,388
543	Rockhill	5,495		*2,000	40	719	844	1,563	180	188,640	1,048	1		20	25	9	760	16,500	7,526	10,414
544	Sumter	5,673	6-21	1,197	100	703	925	1,628	172	198,660	1,155	1	6	29	32	7		60,000	11,208	12,965
545	Union	5,400			150	935	945	1,880	180	180,000	1,000	1	3	24	26	5	1,350	30,000	9,000	12,000

* Statistics of 1903–4.
a Statistics from State report, 1904.
b Approximately.
c Statistics from annual report of the school committee, 1905.
d From State superintendent's annual report for 1905.
e Statistics are for white schools for 1904 combined with colored schools for 1905.
f For white schools only.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904–5*—Continued.

	City.	Population, census of 1900.	School census age	Children of school census age.	Pupils in private and parochial schools	Different pupils enrolled in public day schools.			Number of days the schools were actually in session.	Aggregate number of days' attendance of all pupils.	Average daily attendance	Supervising officers.	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and supervising officers.	Total expenditure.
						Boys.	Girls.	Total.					Men.	Women.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	SOUTH DAKOTA.																			
546	Aberdeen	4,087	6-21	1,727	200	619	611	1,230	178	178,267	1,000	1	7	30	37	6	1,200	$100,000	$23,000	$38,000
547	Lead	6,219	6-21	1,919	0	742	751	1,493	194	228,099	1,180	3	4	35	39	3	1,650	101,000	30,024	57,294
548	Mitchell	4,056	6-21	997	120	376	450	826	173	101,968	590	2	1	20	21	4	730	40,000	12,596	23,469
549	Yankton	4,125	6-21	1,139	....	378	440	818	171½	109,747	640	2	1	22	23	4	820	85,161	13,718	17,960
	TENNESSEE																			
550	Bristol	5,271	6-21	1,603	150	591	589	1,180	176	134,816	766	1	4	15	19	3	1,100	44,050	6,000	9,524
551	Columbia	6,052	6-21	[a] 1,532	.....	479	581	1,060	192	164,736	858	1	3	16	19	4	1,000	35,000	7,300	11,000
552	Johnson City	4,646	6-21	2,196	50	650	690	1,340	180	[b] 180,000	[b] 1,000	2	6	16	22	4	1,100	[b] 26,000	[b] 12,000	.....
553	Murfreesboro*	3,999	6-21	.....	100	360	240	600	....	.....	.....	0	2	10	12	2	300	20,000	4,000	.....
	TEXAS.																			
554	Bonham	5,042	7-17	1,554	60	555	589	1,144	160	155,018	815	2	5	17	23	4	1,075	53,380	15,438	17,832
555	Brenham	5,968	7-18	1,149	135	446	586	1,032	180	120,540	703	1	5	17	22	5	1,125	22,575	11,905	13,725
556	Brownsville	5,305	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
557	Brownwood	3,965	7-17	1,135	60	567	637	1,204	176	135,065	767	1	3	15	18	5	*950	22,822	9,723	12,543
558	Corpus Christi	4,703	7-18	1,920	0	472	437	909	180	147,240	818	4	3	16	19	4	1,024	20,000	12,428	13,243
559	Denton	4,187	7-17	1,380	*150	583	742	1,425	176	186,675	1,061	1	5	17	22	3	1,400	57,800	12,750	14,365
560	Ennis	4,919	7-17	1,318	85	721	683	1,404	180	148,762	929	1	7	21	28	6	1,083	51,180	13,280	27,273
561	Gonzales*	4,297	7-17	592	....	301	320	621	168	93,475	556	....	[a] 3	[a] 12	[a] 15	[a] 5	[a] 750	35,200	7,179	7,344
562	Greenville	6,960	7-17	1,771	*100	841	971	1,812	180	207,711	1,153	2	7	29	36	6	1,355	85,300	17,431	26,187
563	Hillsboro	5,346	8-17	1,200	60	761	808	1,569	180	178,380	991	1	6	23	29	6	1,254	48,802	14,250	20,691
564	McKinney	4,342	7-17	950	100	325	312	637	166	72,660	440	1	3	11	14	3	600	32,000	7,150	8,100
565	Navasota	3,857	7-17	686	20	324	384	708	185	97,427	526	1	3	12	15	2	416	35,000	8,910	*10,500
566	Orange	3,335	7-17	913	25	440	512	952	173	113,597	657	1	2	16	18	3	400	41,701	8,095	9,105
567	Taylor	4,211	8-17	*950	200	508	523	1,031	180	124,972	[b] 694	1	4	18	22	2	900	50,000	11,949	12,000
568	Temple	7,065	7-17	1,742	70	773	941	1,714	178	203,408	1,143	1	7	22	29	6	*1,570	84,450	9,688	16,135
569	Terrell*	6,330	7-17	1,019	75	507	622	1,129	182	132,263	727	1	4	18	22	4	1,193	46,000	11,668	12,337
570	Texarkana	5,256	7-17	2,142	300	700	741	1,441	180	155,154	862	1	4	20	24	4	841	15,200	12,800	14,262
571	Victoria	4,010	8-17	1,440	200	508	525	1,033	170	109,400	645	2	7	17	24	2	1,200	50,000	*9,355	16,870
572	Waxahachie	4,215	8-17	1,219	....	672	733	1,405	174	144,871	832	1	6	17	23	2	1,500	94,775	11,993	16,252
573	Weatherford	4,786	7-17	1,200	350	800	720	1,520	180	184,515	1,025	1	4	21	25	4	600	23,880	11,985	13,759

	UTAH.																		
574	Logan	5,451	6-18	2,114	318	699	734	1,433	170	182,665	1,075	3		10	20	10	1,400	81,207	15,225	24,836
575	Park City	3,759	6-18	1,196	80	583	561	1,144	180	159,426	886	5		20	22	4	1,105	102,000	15,860	37,864
576	Provo City	6,185	6-18	2,379	303	752	864	1,606	176	228,214	1,318		12	23	35	4	1,628	85,500	20,126	36,084
	VERMONT.																		
577	Bellows Falls	4,337	5-18	1,294	0	606	604	1,212	175	196,875	1,125			35	37	6	1,400	125,000	17,333	34,347
578	Bennington	5,656	5-18	1,297	300	470	482	952	192	132,650	698	3	0	22	22	2	925	90,000	12,497	20,777
579	Brattleboro	5,297	5-18	988	204	362	397	759	[c]177	120,313	679	4		25	26	6	956	125,000	15,450	32,550
580	Montpelier	6,266	5-21	1,435	400	440	456	896	170	126,480	744		1	23	24	2	900	60,000	13,453	21,892
581	St. Albans	6,239	8-18	1,300	550	510	549	1,059	189	143,712	822		0	25	25	4	1,248	50,000	13,400	20,400
582	St. Johnsbury	5,566	5-18	1,849	500	506	472	978	183	145,119	793	2	0	30	30	13	1,100	80,000	14,116	28,507
	VIRGINIA.																		
583	Berkley	4,988																	
584	Bristol	4,579	7-20	1,200	50	441	463	904	176	99,068	562		2	12	14	2	800	30,000	6,241	8,099
585	Charlottesville	6,449	5-21	2,250		777	932	1,709	182	246,246	1,353		5	28	33	3	2,000	65,000	11,763	23,701
586	Fredericksburg	5,068	5-21	1,675	234	336	300	735	181	111,734	606			9	13	4	761	12,575	4,262	5,905
587	Staunton	7,289	5-20	1,726	223	455	464	919	182	139,656	767		4	22	26	3	1,500	57,200	10,681	13,207
588	Suffolk	3,937	7-20	1,104	80	380	380	760	180	89,100	495		2	13	15	4	[d]745	11,500	4,972	6,533
589	Winchester	5,161	5-21	1,863	225	398	406	774	190	113,515	590		3	11	14	2	800	16,000	5,778	7,210
	WASHINGTON.																		
590	Olympia	4,092	5-21	1,514	180	594	668	1,262	173	161,681	935		5	22	27	4	1,000	78,800	17,500	27,327
591	Vancouver	4,006	5-21	1,200	250	505	513	1,018	173	138,365	771		4	17	21	4	980	57,650	12,307	[b]16,500
	WEST VIRGINIA.																		
592	Benwood	4,511	6-21	1,000	[a]300	325	330	655	190			[a]2	1	15	16	3	800	70,000	7,350	[a]24,000
593	Bluefield	4,644	6-21	1,757	50	581	661	1,242	[d]175	106,336	926		3	18	21	5	800	40,000	6,570	[a]24,524
594	Clarksburg	4,050	6-21	2,168	300	710	683	1,409	176	171,345	974	2	7	26	33	8	1,350	150,000	17,175	36,000
595	Fairmont	5,655	6-21	2,715	0	905	970	1,875	158	255,960	1,620	2	8	42	50	9	1,800	86,000	15,200	30,400
596	Grafton	5,580	6-21	1,966		552	585	1,137	156			6	5	30	35	6	1,400	300,000		
597	Hinton	3,763	6-21	1,161	0	379	433	812	176	[a]105,920	[a]662		4	15	19	2		80,000	15,000	20,000
598	Martinsburg	7,564	6-21	2,408	125	634	571	1,205	183	175,102	957		5	22	30	6	1,544	42,310	12,826	18,927
599	Moundsville	5,362	6-21	2,204	0	746	787	1,533	165	179,974	1,117	1	3	24	27	4	1,300	100,000	8,999	10,000
	WISCONSIN.																		
600	Antigo	5,145	4-20	2,245	350	785	860	1,645	180	203,725	1,163	2	2	30	32	3	[a]1,200	110,000	15,208	[a]24,576
601	Baraboo	5,781	4-20	1,668	0	683	774	1,457	175	194,284	1,124	2	3	35	38	5	1,600	90,000	19,957	28,867
602	Beaver Dam*	5,128	4-20	1,782	25	502	540	1,048	194	152,872	788	2	2	25	27	6	1,200	80,000	11,900	19,267
603	Berlin	4,499	4-20	1,644	375	360	435	795	187	107,887	567			18	19	3	800	65,500	9,646	21,949
	Depere:																		
604	East side	4,038	4-20	558	314	147	146	293	188	42,421	223	1		7	9	2	325	30,500	5,353	6,473
605	West side		4-20	795	183	146	166	312	180	53,100	295	1	2	8	10	2	360	22,500	8,170	7,225
606	Grand Rapids	4,493	[a]4-20	[a]1,837	[a]200	709	724	1,433	178	190,104	1,074	3	4	29	32	5	1,425	125,000	19,663	31,177

[a] Statistics of 1903–4.
[b] Approximately.
[c] From biennial report of the State superintendent for 1903 and 1904.
[d] High school, 182 days.
[e] Primary grades, 116 days.

TABLE 14.—*School statistics of cities and villages containing between 4,000 and 8,000 inhabitants, 1904-5*—Continued.

	City.	Population, census of 1900	School census age.	Children of school census age.	Pupils in private and parochial schools	Different pupils enrolled in public day schools			Number of days the schools were actually in session.	Aggregate number of days attendance of all pupils	Average daily attendance.	Supervising officers	Regular teachers.			Buildings used for school purposes.	Seats or sittings for study in all public schools.	Value of public property used for school purposes.	Salaries of teachers and supervising officers.	Total expenditure.
						Boys.	Girls.	Total.					Men.	Women.	Total.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	WISCONSIN—continued.																			
607	Kaukauna	5,115	7-13	800	600	275	275	550	175	90,000	515	4	4	21	25	3	700	$100,000	$10,000	$13,000
608	Marshfield	5,240	4-20	2,405	665	535	505	1,040	190	142,009	746	3	2	22	24	4	1,380	86,000	13,121	19,089
609	Menasha	5,589	4-20	2,377	835	432	449	881	185	116,720	631	1	3	21	24	3	900	78,000	11,518	16,050
610	Menomonie	5,655	4-20	2,065	133	765	803	1,568	173	209,505	1,212	*3	7	38	45	9	1,600	300,000	30,965	46,068
611	Monroe*	5,027	4-20	1,245	3	513	632	1,145	177	131,364	742	2	2	23	25	4	800	150,000	11,145	17,474
612	Neenah	5,954	4-20	1,959	108	612	669	1,281	192	153,408	799	1	3	32	35	7	1,185	100,000	16,000	22,520
613	Oconto	5,646	4-20	2,204	*623	*380	*408	*788	174	118,755	682	2	7	15	22	4	900	75,000	12,000	17,000
614	Portage	5,459	4-20	1,799	229			1,570	190	152,000	800	1	1	23	24	5	1,500	100,000	12,380	18,000
615	Rhinelander*	4,998	4-20	1,705	185	548	651	1,199	..	..	860	..	..	..	..	6	1,300	..	12,548	18,541
616	Washburn	6,814	4-20	1,556	300	531	504	1,035	173	*135,977	*756	3	1	26	27	6	*1,100	125,000	16,000	27,000
617	Waukesha	7,419	7-14	898	210	....	.....	1,378	*190	200,304	1,054	1	5	31	36	6	1,450	100,000	19,524	29,132
	WYOMING.																			
618	Rock Springs	4,363	6-21	1,009	0	446	491	937	178	.....	....	1	2	17	19	5	875	25,000	11,870	14,000

*Statistics of 1903-4.

*Approximately.

TABLE 15.—*Summary of statistics of public kindergartens reported in cities of 4,000 population and over, 1904–5.*

State or Territory.	Number of cities and villages reporting public kindergartens.	Number of schools.	Number of instructors.	Pupils.			
				Boys.	Girls.	Not reported as to sex	Total.
United States	358	3,176	4,795	[a] 91,064	[a] 92,081	[a] 21,973	[a] 205,118
North Atlantic Division	177	1,766	2,419	45,120	44,895	16,979	107,003
South Atlantic Division	13	80	159	1,893	1,962	.....	3,855
South Central Division	19	66	131	1,856	2,037	627	4,520
North Central Division	127	1,120	1,833	37,253	38,246	4,367	79,866
Western Division	22	145	253	4,933	4,941	..	9,874
North Atlantic Division:							
Maine	7	23	39	195	197	649	1,041
New Hampshire	7	21	34	414	438		852
Vermont	5	14	20	275	277	47	599
Massachusetts	33	277	497	8,129	8,124	254	16,507
Rhode Island	6	51	92	1,695	1,650	164	3,509
Connecticut	18	94	169	2,252	2,303	758	5,313
New York	55	797	881	23,855	22,267	1,496	46,548
New Jersey	32	251	307	3,357	3,305	12,110	18,772
Pennsylvania	14	237	300	5,957	6,394	1,511	13,862
South Atlantic Division							
Maryland	1	19	40	404	402		806
District of Columbia	1	42	86	1,023	1,056		2,079
Virginia	2	8	16	193	188		381
West Virginia	2	2	4	82	103	.....	185
North Carolina	1	1	2	20	30		50
South Carolina	2	2	2	39	38		77
Georgia	3	5	8	102	125		227
Florida	1	1	1	30	20		50
South Central Division:							
Kentucky	4	24	49	742	843	627	2,212
Alabama	5	8	14	144	116		260
Mississippi	3	4	5	101	127		228
Louisiana	3	22	51	643	733		1,376
Texas	3	5	8	96	109		205
Oklahoma	1	3	6	130	109		239
North Central Division							
Ohio	13	124	169	3,958	4,207	95	8,260
Indiana	15	76	104	1,652	1,787	245	3,684
Illinois	9	220	278	9,232	9,330		18,562
Michigan	31	186	203	5,991	5,832	570	12,393
Wisconsin	29	168	331	6,733	6,907	1,761	15,401
Minnesota	4	56	96	1,713	1,931	400	4,044
Iowa	17	84	132	943	995	1,296	3,234
Missouri	2	155	375	5,576	5,819		11,395
South Dakota	1	2	2	19	22	..	41
Nebraska	3	46	80	1,412	1,331		2,743
Kansas	3	3	3	24	25		49
Western Division							
Montana	1	6	6	68	75		143
Colorado	2	41	76	1,786	1,793		3,579
New Mexico	1	1	1	23	36		59
Utah	2	5	11	136	127		263
Nevada	1	1	2	40	44		84
Washington	2	5	6	157	186		343
California	13	86	151	2,723	2,680		5,403

[a] Not including statistics of pupils in cities known to have kindergartens but which failed to report.

TABLE 16.—*Public kindergartens in cities of over 4,000 inhabitants in 1904–5.*

State and city.	Number of schools.	Instructors.	Pupils.		
			Boys.	Girls.	Total.
1	2	3	4	5	6
ALABAMA.					
Bessemer	1	1	16	14	30
Florence	1	2	20	20	40
Mobile	4	7	87	53	140
Opelika	1	2	*8	*12	*20
Phœnix *	1	2	13	17	30
CALIFORNIA.					
Fresno	1	1	40	34	74
Los Angeles	47	86	1,617	1,553	3,170
Oakland	2	2	72	71	143
Pasadena	6	14	186	225	411
Pomona	3	6	95	98	193
Redlands:					
Lugonia district	3	3	60	35	95
Redlands district	1	2	*27	*39	*66
Riverside	1	2	18	44	62
Sacramento	9	16	206	212	418
San Diego	6	6	201	171	372
Santa Ana	2	4	64	74	138
Santa Barbara	4	7	112	92	204
Santa Cruz	1	2	25	32	57
COLORADO.					
Denver	37	68	1,598	1,561	3,159
Pueblo (district No. 20)	4	8	188	232	420
CONNECTICUT.					
Bristol	4	6	141	146	287
East Hartford	3	6	.....	.....	159
Hartford	18	57	.....	.....	.....
Killingly	1	1	26	24	50
Manchester (Ninth District)	1	2	128	143	271
Meriden	1	2	.....	.....	75
Naugatuck	4	4	125	131	256
New Britain	8	18	281	309	590
New Haven	18	32	829	888	1,717
New London	5	10	.....	.....	250
New Milford	1	1	19	23	42
Norwalk	6	12	179	152	331
Norwich (Central District)	5	10	.....	.....	205
Putnam	1	2	.....	.....	78
Stamford	6	6	170	138	308
Waterbury	7	10	284	278	562
Willimantic	3	5	.....	.....	.....
Winsted	2	5	70	71	141
DISTRICT OF COLUMBIA.					
Washington	42	86	1,023	1,056	2,079
FLORIDA.					
Lake City	1	1	30	20	50
GEORGIA.					
Athens	1	1	28	29	57
Augusta	3	6	60	70	130
Columbus	1	1	14	26	40
ILLINOIS.					
Chicago	200	235	8,723	8,772	17,495
Dixon (north side)	1	3	33	36	69
Edwardsville *	1	1	.....	.....	.....
Evanston:					
District No. 75	4	8	96	113	209
District No. 76	2	4	50	55	105
Lagrange	3	4	67	78	145
Moline	7	19	218	226	444
Pontiac	1	2	25	25	50
Spring Valley	1	2	20	25	45
INDIANA.					
Anderson	2	2	78	83	161
Columbus	2	3	40	50	90
Evansville	7	14	274	280	554

* Statistics of 1903–4.

TABLE 16.—*Public kindergartens in cities of over 4,000 inhabitants in 1904–5*—Continued.

State and city.	Number of schools.	Instructors.	Pupils.		
			Boys.	Girls.	Total.
1	2	3	4	5	6
INDIANA—continued.					
Fort Wayne	5	10	151	169	320
Hammond *	6	12	178	228	406
Laporte	2	4	56	79	135
Michigan City	7	7	.....	.....	245
Muncie	2	12	97	89	186
Richmond	5	5	116	124	240
Shelbyville	4	2	79	92	171
South Bend	8	16	182	201	383
Terre Haute	23	12	288	281	569
Valparaiso	1	1	47	52	99
Vincennes	1	2	39	38	77
Whiting *	1	2	27	21	48
IOWA.					
Burlington	5	8	*106	*112	*218
Cedar Falls	1	2	.....	.....	.....
Cedar Rapids	4	8	.....	.....	261
Charles City	1	2	39	46	85
Council Bluffs	11	18	.....	.....	.....
Creston	4	8	96	104	200
Des Moines (west side)	20	30	.....	.....	913
Dubuque	7	14	234	243	477
Fort Dodge	7	7	.....	.....	.....
Grinnell	3	3	60	64	124
Marshalltown	7	7	145	141	286
Mount Pleasant	2	4	.....	.....	69
Oskaloosa	5	5	*98	*92	*190
Washington	1	3	55	81	136
Waterloo:					
East side	4	8	70	70	140
West side	1	3	40	42	82
Webster City	1	2	.....	.....	53
KANSAS.					
Coffeyville	1	1	10	15	25
Fort Scott	1	1	.....	.....	.....
Winfield	1	1	14	10	24
KENTUCKY.					
Covington	6	12	273	316	589
Frankfort	1	2	27	23	50
Lexington	5	20	.....	.....	*627
Louisville	12	15	442	504	946
LOUISIANA.					
Monroe	1	2	24	33	57
New Orleans	20	27	594	673	1,267
Shreveport	1	2	25	27	52
MAINE.					
Bangor	5	11	92	88	180
Biddeford	1	1	14	22	36
Lewiston	4	4	62	64	126
Oldtown	1	2	9	11	20
Portland	9	18	.....	.....	589
Saco	1	1	18	12	30
Skowhegan *	2	2	.....	.....	60
MARYLAND.					
Baltimore	19	40	404	402	806
MASSACHUSETTS.					
Andover	3	4	61	59	120
Attleboro	2	8	44	55	99
Boston	99	184	3,552	3,502	7,054
Braintree	5	5	74	75	149
Bridgewater	1	1	22	15	37
Brookline	11	20	266	261	527
Cambridge	16	32	451	478	929
Chelsea	2	2	61	54	115
Chicopee	2	2	37	44	81

*Statistics of 1903–4.

TABLE 16.—*Public kindergartens in cities of over 4,000 inhabitants in 1904–5*—Continued.

State and city.	Number of schools.	Instructors.	Pupils.		
			Boys.	Girls.	Total.
1	2	3	4	5	6
MASSACHUSETTS—continued.					
Dedham	4	8	70	84	154
Easton	1	2	30	19	49
Fall River	3	6	89	115	204
Greenfield	2	2	27	40	67
Haverhill	6	4	116	121	237
Holyoke	7	14	217	240	457
Lowell	12	24	403	347	750
Marblehead	2	4	.....	.....	86
Medford	7	5	165	132	297
Melrose	8	16	145	137	282
Milton	4	7	.....	.....	168
New Bedford	3	6	94	87	181
Newton	14	29	345	394	739
North Adams	6	12	197	224	421
Northampton	4	7	65	84	149
Pittsfield	2	4	60	64	124
Salem	5	10	135	117	252
Somerville	4	8	132	104	236
Springfield	14	26	575	572	1,147
Wellesley	1	2	17	10	27
Westfield	5	10	89	69	158
West Springfield	3	3	85	63	148
Winchester	2	4	52	55	107
Worcester	17	31	453	503	956
MICHIGAN.					
Bay City	2	2	83	76	159
Benton Harbor	1	1	15	16	31
Bessemer	2	4	50	70	120
Big Rapids	2	2	32	36	68
Calumet	14	14	445	438	883
Coldwater	2	2	32	39	71
Delray	3	3	61	90	151
Detroit	47	79	2,077	1,887	3,964
Dowagiac	1	1	56	52	108
Escanaba	2	4	100	100	200
Flint	4	6	.....	.....	250
Grand Haven	1	3	45	43	88
Grand Rapids	32	35	770	751	1,521
Holland	3	3	98	117	215
Ionia	3	3	118	113	231
Ironwood	6	16	228	207	435
Ishpeming *	5	10	260	250	510
Kalamazoo	8	12	282	301	583
Manistee	6	6	*186	*203	*389
Manistique	3	3	77	70	147
Marquette	2	4	62	68	130
Menominee	6	6	215	202	417
Mount Clemens	4	5	125	120	245
Muskegon	8	10	243	210	453
Negaunee	1	2	39	52	91
Pontiac	4	4	76	86	162
St. Joseph	2	4	40	49	89
Sault Ste. Marie	3	5	85	98	183
Traverse City	5	8	.....	.....	320
Wyandotte	3	5	64	58	122
Ypsilanti	1	*1	27	30	57
MINNESOTA.					
Duluth	12	15	415	425	840
Minneapolis	4	8	218	225	443
St. Paul	33	65	1,090	1,281	2,361
Winona	7	8	.....	.....	400
MISSISSIPPI.					
McComb	1	1	45	40	85
Natchez	2	2	25	40	65
Vicksburg *	1	2	31	47	78
MISSOURI.					
Kansas City	22	31	663	700	1,363
St. Louis	133	344	4,913	5,119	10,032

* Statistics of 1903–4.

TABLE 16.—*Public kindergartens in cities of over 4,000 inhabitants in 1904–5*—Continued.

State and city.	Number of schools.	Instructors.	Pupils.		
			Boys.	Girls.	Total.
1	2	3	4	5	6
MONTANA.					
Helena	6	6	68	75	143
NEBRASKA.					
Lincoln	13	26	395	412	807
Omaha	32	52	933	894	1,877
York	1	2	34	25	59
NEVADA.					
Reno *	1	2	40	44	84
NEW HAMPSHIRE.					
Claremont	2	2	6	15	21
Concord (Union District)	6	12	121	111	232
Franklin	2	2	26	32	58
Keene	2	4	45	39	84
Manchester	1	2	16	22	38
Nashua	4	4	112	118	230
Portsmouth	4	8	88	101	189
NEW JERSEY.					
Asbury Park	1	2	54	32	86
Bayonne	7	11	301	280	581
Bloomfield	5	10	180	189	369
Boonton	1	1	20	15	35
Camden	7	7	111	132	243
Dover	3	3	64	52	116
East Orange	7	12	255	268	523
Englewood	5	7	79	88	167
Hoboken	8	16	.....	.....	1,056
Jersey City	5	5	.....	.....	403
Long Branch	3	4	108	113	221
Madison	1	1	22	24	46
Montclair	7	15	210	175	385
Newark	103	97	.....	.....	7,716
New Brunswick	1	1	40	35	75
Newton	1	1	.....	.....	93
North Plainfield	2	4	67	57	124
Orange	6	12	230	232	462
Passaic	9	16	.....	.....	863
Paterson	18	19	.....	.....	1,979
Perth Amboy	1	2	30	46	76
Plainfield	5	6	169	158	327
Princeton	2	3	42	49	91
Rutherford	2	3	34	45	79
Salem	2	2	*33	*27	*60
Somerville	1	2	44	49	93
South Orange	3	5	51	69	120
Summit	2	3	39	62	101
Town of Union	3	3	152	135	287
Trenton	19	20	435	423	858
West Hoboken	5	5	402	390	792
West Orange	6	9	185	160	345
NEW MEXICO.					
Santa Fe	1	1	23	36	59
NEW YORK.					
Albany	23	23	560	528	1,088
Amsterdam	7	8	81	90	171
Auburn	5	9	107	115	222
Binghamton	13	13	282	318	600
Buffalo	23	28	742	835	1,577
Catskill	2	2	25	25	50
Cohoes	4	5	100	150	250
Cortland	1	1	24	14	38
Fredonia	2	2	53	62	115
Geneva	4	9	126	114	240
Glens Falls	.....	.....	.....	.....	.....
Gloversville	7	7	.....	.....	320
Haverstraw	1	1	29	34	63
Herkimer	2	2	50	48	98
Hornellsville	4	4	87	116	203
Ilion	2	4	59	49	108
Ithaca	2	2	42	38	80

* Statistics of 1903–4.

TABLE 16.—*Public kindergartens in cities of over 4,000 inhabitants in 1904–5*—Continued.

State and city.	Number of schools.	Instructors.	Pupils.		
			Boys.	Girls.	Total.
1	2	3	4	5	6
NEW YORK—continued.					
Jamestown	9	11	278	276	554
Johnstown	2	2	56	40	96
Lancaster	1	1	34	31	65
Lansingburg	5	6	99	69	168
Little Falls	3	3	48	50	98
Lockport	3	3	85	98	183
Mamaroneck	1	3	23	44	67
Mattcawan	1	1	50	57	107
Medina	2	2	44	55	99
Mount Vernon	6	6	133	167	300
New Rochelle	7	10	243	241	484
New York	491	460	14,289	13,570	27,859
Niagara Falls	8	13	218	263	481
North Tarrytown	1	1	25	25	50
North Tonawanda	4	6	131	166	297
Nyack	1	1	30	42	72
Olean	6	6	135	120	255
Ossining	2	2	36	40	76
Peekskill (District No. 7)	1	1	23	26	49
Plattsburg	4	4	102	114	216
Port Chester	3	5	156	129	285
Port Jervis	1	1	32	36	68
Poughkeepsie	4	4	112	119	231
Rensselaer	2	2	52	62	114
Rochester	32	73	1,848	1,768	3,616
Rome	5	6	110	81	191
Sandy Hill	1	2	42	40	82
Saratoga Springs	5	6	96	79	175
Schenectady	8	8	205	211	416
Syracuse	25	34	902	850	1,752
Tarrytown	1	2	*21	*27	*48
Troy	8	16	175	162	337
Utica	15	29	.....	.....	1,166
Waterloo	2	3	12	15	27
Watertown	4	5	90	70	160
Watervliet	3	4	73	50	123
White Plains	4	4	71	89	160
Yonkers	14	15	409	389	798
NORTH CAROLINA.					
Greensboro*	1	2	20	30	50
OHIO.					
Akron	15	15	436	464	900
Canton	1	1	27	26	53
Cleveland	33	63	1,142	1,267	2,409
Dayton	22	23	609	605	1,214
Delaware	1	1	28	30	58
Fostoria	1	3	25	35	60
Fremont	3	6	100	100	200
Mansfield	7	14	75	107	182
Norwood	3	3	.....	.....	95
Springfield	1	3	34	34	68
Toledo	35	32	1,418	1,495	2,913
Xenia	1	1	34	22	56
Youngstown	1	4	30	22	52
OKLAHOMA.					
Oklahoma City*	3	6	130	109	239
PENNSYLVANIA.					
Allegheny	18	36	.....	.....	1,498
Altoona	4	8	145	182	327
Archbald	2	4	50	63	113
Erie	1	2	40	40	80
Greenville	1	4	25	25	50
Huntingdon	1	1	.....	.....	*25
Kittanning	1	2	34	51	85
Philadelphia	143	196	3,609	3,664	7,273
Pittsburg	35	71	1,369	1,593	2,962
Rankin	1	2	55	74	129
Scranton	21	21	416	455	871
Tarentum	2	2	41	48	89
Titusville	4	8	94	104	198
Wilkesbarre	3	3	79	95	174

*Statistics of 1903–4.

TABLE 16.—*Public kindergartens in cities of over 4,000 inhabitants in 1904–5*—Continued.

State and city.	Number of schools.	Instructors.	Pupils.		
			Boys.	Girls.	Total.
1	2	3	4	5	6
RHODE ISLAND.					
Cranston	4	4	.....	.....	164
Newport	5	5	163	156	319
Pawtucket	12	24	412	418	830
Providence	26	52	1,043	1,000	2,043
South Kingstown	1	1	15	18	33
Woonsocket	3	6	62	58	120
SOUTH CAROLINA.					
Anderson	1	1	27	23	50
Gaffney *	1	1	12	15	27
SOUTH DAKOTA.					
Sioux Falls	2	2	19	22	41
TEXAS.					
Cleburne	1	1	10	15	25
El Paso	3	4	76	80	156
Navasota	1	1	10	14	24
UTAH.					
Ogden	4	8	96	100	196
Salt Lake City	1	3	40	27	67
VERMONT.					
Bennington	1	2	.....	.....	47
Burlington	6	6	129	148	277
Montpelier	1	2	25	26	51
Rutland	4	8	76	73	149
St. Albans	2	2	45	30	75
VIRGINIA.					
Norfolk	3	6	40	45	85
Richmond	5	10	153	143	296
WASHINGTON.					
Seattle	3	4	105	111	216
Spokane	2	2	52	75	127
WEST VIRGINIA.					
Fairmont	1	1	28	32	60
Parkersburg	1	3	54	71	125
WISCONSIN.					
Appleton	7	14	301	336	637
Ashland	1	2	29	49	78
Baraboo	4	8	74	80	154
Beaverdam	1	2	21	31	52
Beloit	5	10	250	249	499
Berlin	2	2	44	61	105
De Pere:					
East side	1	2	11	10	21
West side	1	1	36	24	60
Fond du Lac	7	16	343	348	691
Grand Rapids	4	4	90	110	200
Janesville	4	8	.....	.....	238
Kaukauna	2	2	50	40	90
Kenosha	2	3	.....	.....	96
Madison	3	6	90	96	186
Manitowoc	5	6	.....	.....	300
Marinette	6	6	.....	.....	326
Marshfield	1	2	30	35	65
Menasha	3	5	87	92	179
Menomonie	3	4	100	123	223
Merrill	2	4	60	67	127
Milwaukee	51	102	3,109	3,191	6,300
Monroe	2	3	80	70	150
Neenah	2	*4	55	95	150
Oshkosh	11	25	582	571	1,153
Racine	9	17	.....	.....	801
Sheboygan	7	22	399	376	775
Stevens Point	4	5	120	127	247
Superior	10	30	466	483	949
Wausau	8	16	306	303	609

* Statistics of 1903–4.

CHAPTER XX.

UNIVERSITIES, COLLEGES, AND TECHNOLOGICAL SCHOOLS.

Contents.—Number of institutions—Professors and instructors—Retirement of college professors—Preceptors at Princeton University—Changes in programme of studies in Columbia University—Students—Degrees—Property—Income—State taxation for higher education—Benefactions—Statistical tables.

The total number of institutions included in the tables of this chapter is 619, of which number 122 admit women only. Of the 453 universities and colleges included in Table 30, men only are admitted to the undergraduate departments of 131 institutions, while 322 are open to both men and women. Of the 44 schools of technology included in Table 37, women are reported in the undergraduate departments of 22 institutions.

The following-named institutions were reported as having been closed: Austin College, Effingham, Ill.; Gaston College, Dallas, N. C.; Martin Female College, Pulaski, Tenn. The following changes have been made: French American College, Springfield, Mass., changed name to American International College; Dakota University, Mitchell, S. Dak., changed name to Dakota Wesleyan University; Williamston Female College, Williamston, S. C., changed name and location to Lander College, Greenwood, S. C.; Washington Agricultural College and School of Science, Pullman, Wash., changed name to State College of Washington.

PROFESSORS AND INSTRUCTORS.

The total number of professors and instructors in all departments of these institutions was reported as 18,221 men and 4,392 women. The number in undergraduate departments was 11,038 men and 3,213 women, including 386 men and 1,530 women in Division B of colleges for women who were not classified as to departments. The average number of teachers in undergraduate departments is 23.

RETIREMENT OF COLLEGE PROFESSORS.

The Carnegie Foundation for the Advancement of Teaching was incorporated by an act of Congress approved March 10, 1906. One of the objects of the corporation is to provide retiring allowances for professors of universities, colleges, and technical schools in the United States, Canada, and Newfoundland, and to it has been committed the administration of the fund of $10,000,000 given for that purpose by Mr. Andrew Carnegie in April, 1905.

On account of the varying standards of the institutions for higher education in this country, the corporation has found it necessary, in the administration of the fund for the retirement of professors of colleges, to define the term college. The requirements adopted by the corporation are the same practically as those in force in the States of New York and Pennsylvania for the chartering of colleges, and are as follows:

An institution to be ranked as a college must have at least six professors giving their entire time to college and university work, a course of four full years in liberal arts and sciences, and should require for admission not less than the usual four years of academic or high school preparation, or its equivalent, in addition to the preacademic or grammar school studies. It must also have a productive endowment fund of not less than $200,000.

The act of incorporation provides that "retiring pensions shall be paid to such teachers only as are or have been connected with institutions not under control of a sect or which do not require their trustees, their officers, faculties, or students (or a majority thereof) to belong to any specified sect, and which do not impose any theological test as a condition of entrance therein or of connection therewith." In the matter of sectarian control the corporation has made the following regulations for the admission of institutions to the benefits of the fund:

1. Universities, colleges, and technical schools of requisite academic grade, not owned or controlled by a religious organization, and whose acts of incorporation or charters specifically provide that no denominational or sectarian test shall be applied in the choice of trustees, officers, or teachers, nor in the admission of students.

2. In the cases of institutions not owned or controlled by a religious organization, and in which no specific statement concerning denominational tests is made in the charters or acts of incorporation, the trustees of such institutions shall be asked to certify by a resolution to the trustees of the Carnegie Foundation for the Advancement of Teaching, that notwithstanding the lack of specific prohibition in the charter, "no denominational test is imposed in the choice of trustees, officers, or teachers, or in the admission of students, nor are distinctly denominational tenets or doctrines taught to the students."

The question as to whether State institutions shall share in the fund has not been decided, and its consideration has been postponed until the meeting of the trustees in November, 1906.

The following rules governing the retirement of professors with an allowance have been made by the corporation.

1. *Age.*—To be eligible for retirement on the ground of age a teacher must have reached the age of 65 and must have been for fifteen years professor in a higher institution of learning. Whether a professor's connection as a teacher with his institution shall cease at an earlier or later age than 65 is a matter solely within the jurisdiction of the professor himself and the authorities of the institution in which he serves.

2. *Long service.*—To be eligible for retirement on the ground of length of service a teacher must have had twenty-five years' service as a professor in a higher institution of learning. It is not necessary that the whole of the service shall have been given in accepted colleges, universities, or technical schools.

In no case shall any allowance be paid to a teacher who continues to give the whole or part of his time to the work of teaching as a member of the instructing staff of a college or technical school.

Rules for the granting of normal retiring allowances.

1. A normal retiring allowance is considered to be one awarded to a professor in an accepted university, college, or technical school on the ground of either age or length of service. The term professor, as here used, is understood to include presidents, deans, professors, associate professors, and assistant professors in institutions of higher learning.

2. Retiring allowances shall be granted under the following rules, upon the application of the institution with which the professor is connected, and in the application it should be clearly set forth whether the retiring allowance is recommended on the ground of age or service.

3. In reckoning the amount of the retiring allowance the average salary for the last five years of active service shall be considered the active pay.

4. Any person 65 years of age, and who has had not less than fifteen years of service as a professor, and who is at the time a professor in an accepted institution, shall be entitled to an annual retiring allowance computed as follows:

(*a*) For an active pay of $1,600 or less, an allowance of $1,000, provided no retiring allowance shall exceed 90 per cent of the active pay.

(*b*) For an active pay greater than $1,600 the retiring allowance shall equal $1,000, increased by $50 for each $100 of active pay in excess of $1,600.

(*c*) No retiring allowance shall exceed $3,000.

5. Any person who has had a service of twenty-five years as a professor, and who is at the time a professor in an accepted institution, shall be entitled to a retiring allowance computed as follows:

(*a*) For an active pay of $1,600 or less, a retiring allowance of $800, provided that no retiring allowance shall exceed 80 per cent of the active pay.

(*b*) For an active pay greater than $1,600 the retiring allowance shall equal $800, increased by $40 for each $100 of active pay in excess of $1,600.

(*c*) For each additional year of service above twenty-five, the retiring allowance shall be increased by 1 per cent of the active pay.

(*d*) No retiring allowance shall exceed $3,000.

6. Any person who has been for ten years the wife of a professor in actual service may receive during her widowhood one-half of the allowance to which her husband would have been entitled.

7. In the preceding rules, years of leave of absence are to be counted as years of service, but not exceeding one year in seven. Librarians, registrars, recorders, and administrative officers of long tenure, whose salaries may be classed with those of professors and assistant professors, are considered eligible to the benefits of a retiring allowance.

8. Teachers in the professional departments of universities whose principal work is outside the profession of teaching are not included.

9. The benefits of the foundation shall not be available to those whose active service ceased before April 16, 1905, the date of Mr. Carnegie's original letter to the trustees.

10. The Carnegie Foundation for the Advancement of Teaching retains the power to alter these rules in such manner as experience may indicate as desirable for the benefit of the whole body of teachers.

The corporation recognizes the fact that there may be occasionally exceptional cases of teachers in institutions below the grade prescribed for accepted institutions who should by reason of great merit or distinguished service be entitled to consideration. All such cases will be dealt with by the corporation through the individual and not through the institution with which the teacher may be connected.

The president of the Carnegie Foundation for the Advancement of Teaching is Henry S. Pritchett, LL. D., New York, N. Y.

PRECEPTORS AT PRINCETON UNIVERSITY.

In 1905 Princeton University made a notable addition to its faculty in the appointment of 47 preceptors with the rank of assistant professor. This large addition was rendered necessary by a change in the methods of instruction introduced into the university, by which it is intended to take the instruction as much as possible out of the formal class rooms and get it into the lives of the undergraduates. The preceptors, with very few exceptions, do not give instruction in class rooms as such, but devote themselves exclusively to private conferences with the students under their charge, guiding and directing their reading and encouraging them in every way possible in their work. President Wilson in his report for 1905 says that since the change was made the amount of work done by the students has increased amazingly, but what pleases them more is the character of the work done and the willingness and zest with which it is undertaken.

The new appointments have not been made in the laboratory departments, where the students have been brought into close personal contact with the teachers, but in what may be called the reading courses. The departments in which the appointments have been made, with the number in each, are as follows: Philosophy, 5; history, politics, and economics, 8; art and archaeology, 1; classics, 11; English, 8; modern languages, 8; mathematics, 5; geology, 1.

The degrees held by the preceptors are as follows: Ph. D., 34; Sc. D., 1; A. M., 6; A. B., 4; B. S., 1; B. Litt., 1. The universities conferring the Ph. D. degree on the preceptors and the number from each are as follows: Harvard, 7; Johns Hopkins, 5; Chicago, 4; Columbia, 3; Yale, 3; Bonn, 2; Cornell, 2; Halle, 2; Princeton, 2; Heidelberg (Germany), 1; Leipzig, 1; Michigan, 1; Pennsylvania, 1. The 47 preceptors represent in their first degrees 29 different institutions, Princeton leading with 9.

CHANGES IN PROGRAMME OF STUDIES IN COLUMBIA UNIVERSITY.

On July 1, 1905, the new programme of studies in Columbia College went into effect. It removes the emphasis from the number of years spent in college and places it upon the character of the work done. Hereafter students will be admitted to the college in February at the beginning of the second half year as well as in September. They will be graduated whenever they have accomplished 124 points of work (a point representing class-room work of one hour a week for a half year, two hours of laboratory work being given the weight of one hour of class-room or lecture work). Provision is made by which excellence in scholarship is to receive additional credit, while poor work results in the withholding of credit for such work in more than one of the courses. By means of the system adopted the length of time to be consumed in the course depends largely on the student, a conscientious and faithful student being able to complete the course in three years.

When a student has completed 72 points in the college, including all prescribed courses, he may substitute for the wide elective opportunity then offered him the curriculum of one of the professional schools of the university (excepting the law school). On the completion of two years of the professional curriculum the bachelor's degree will be conferred. To choose the curriculum of the law school the student must have completed in Columbia College 94 points of work, and the bachelor's degree will be conferred after one year's attendance on the law school course.

The B. S. degree will hereafter be conferred by Columbia University on students who do not include ancient languages in their course of study, while the A. B. degree will be reserved for students who take at least one ancient language and its literature.

STUDENTS.

The total number of undergraduate and resident graduate students in universities and colleges for men and for both sexes, colleges for women (Division A), and in schools of technology is reported as 126,404, an increase of 8,375 over the number for the preceding year. The number of students for each year from 1889–90 to 1904–5 is as follows:

Number of undergraduate and resident graduate students in universities, colleges, and schools of technology from 1889–90 to 1904–5

Year.	Universities and colleges for men and for both sexes		Colleges for women (Division A)	Schools of technology.		Total number.	
	Men.	Women.	Women.	Men.	Women.	Men.	Women.
1889–90	38,056	8,075	1,979	6,870	707	44,926	10,761
1890–91	40,089	9,459	2,265	6,131	481	46,220	12,185
1891–92	45,032	10,390	2,636	6,131	481	51,163	13,507
1892–93	46,660	11,469	3,198	8,616	843	55,305	15,530
1893–94	50,297	13,144	3,578	9,517	376	59,814	18,098
1894–95	52,586	14,298	3,667	9,467	106	62,053	19,071
1895–96	56,550	16,746	3,910	8,587	065	65,143	21,721
1896–97	55,755	16,536	3,913	8,907	094	64,662	21,543
1897–98	58,467	17,765	4,416	8,611	269	67,018	23,470
1898–99	58,467	18,948	4,593	9,038	339	67,505	24,880
1899–1900	61,812	20,452	4,872	10,347	440	72,159	26,764
1900–1901	65,069	21,466	5,260	10,403	151	75,472	27,870
1901–2	66,325	22,567	5,549	11,803	202	78,153	29,258
1902–3	69,178	24,863	5,749	13,216	1,124	82,394	31,736
1903–4	71,817	24,413	6,341	14,189	269	86,006	32,023
1904–5	77,250	26,739	6,305	14,011	1,199	92,161	34,243

In addition to the number of students for 1905 mentioned above there were enrolled *11,213 in college* departments and 106 in graduate departments of colleges for women *(Division B).*

Of the institutions included in this chapter, 302 have less than 100 students each in undergraduate departments, and 24 have more than 1,000 each in those departments.

The number of undergraduate students in the various courses of study, so far as reported, is as follows:

Liberal arts (including all colleges for women)	82,629
Commerce	1,810
Agriculture (including some special-course students)	3,197
Mechanical engineering	6,654
Civil engineering	7,356
Electrical engineering	5,204
Chemical engineering	759
Mining engineering	2,547
Textile engineering	138
Sanitary engineering	34
General engineering (including unclassified first-year engineering students)	1,893
Architecture	569
Household economy	849

The students classed under "general engineering courses" include a large number of first-year students in engineering in institutions where the work of the first year is the same for all of the various engineering courses, and where differentiation by courses does not take place until the beginning of the second year.

Resident graduate students to the number of 6,935 were reported by 229 different institutions. Thirteen of the larger universities reported more than 100 graduate students each, and the total number of such students at the 13 institutions was 4,152. Of the total number of graduate students 2,004 are women.

DEGREES.

The total number of degrees and the number of each kind conferred on men and on women was as follows:

Degrees conferred in 1904–5.

Degree.	On men.	On women.	Degree.	On men.	On women.
A. B	5,650	3,785	B. Acc's	57	12
B. S	3,576	554	B. Paint	2	43
Ph. B	700	361	A. M	1,207	341
B. L	103	562	M. S	155	29
B. C. E	50	.....	M. L	11	5
B. M. E	51	.....	Ph. M	10	6
B. E. E	1	.....	C. E	327	1
B. E. M	2	.....	M. E	404	.....
B. E	51	.....	E. E	129	.....
Met. E	4	.....	E. M	185	.....
A. C	10	.....	M. M. E	9	.....
B. Arch	18	.....	M. C. E	3	.....
B. Agr	15	.....	M. C. S	7	.....
B. S. A	71	2	M. Acc's	96	.....
B. L. S	2	18	M. F	24	.....
B. Mus	9	238	M. Arch	1	.....
B. Ped	17	35	M. Ped	15	5
B. S. D	2	3	Sc. D	3	.....
B. Di	.....	10	Ph. D	336	25
L. I	31	33	Ped. D	6	3
B. O	2	19	Mus. D	1	.....
B. F. A	1	.....			
B. C. S	17	1	Total	13,371	6,091

The total number of Ph. D. degrees conferred on examination was 361, of which number 25 were conferred on women. Ten men received the degree from Illinois Wesleyan University for work done *in absentia*, and 11 institutions conferred it as an

honorary degree on 12 different persons. The number of Ph. D. degrees conferred by each of the several institutions was as follows:

Institutions conferring Ph. D. degree in 1905.

Institution.	On examination.		Honorary.
	On men.	On women.	
Spring Hill College (Alabama)	0	0	1
University of California	4	0	0
Santa Clara College (California)	0	0	1
Leland Stanford Junior University	1	0	0
University of Denver	3	1	0
Yale University	31	5	0
Catholic University of America	1	0	0
Georgetown University	2	0	0
George Washington University	4	0	0
Morris Brown College	0	0	1
Illinois Wesleyan University	10	0	0
University of Chicago	39	5	0
Ewing College	3	0	0
University of Illinois	1	0	0
Westfield College	5	0	1
Wheaton College	0	0	2
Taylor University	1	0	0
University of Iowa	2	0	0
Kansas City University	3	0	1
Johns Hopkins University	35	0	0
New Windsor College	1	0	0
Boston University	13	1	0
Harvard University	39	0	0
Radcliffe College	0	1	0
Tufts College	1	0	0
Clark University	18	0	0
Adrian College	0	0	1
University of Michigan	6	1	0
University of Minnesota	3	0	0
University of Missouri	2	0	0
St. Louis University	0	0	1
University of Nebraska	2	1	0
Princeton University	4	0	0
Cornell University	20	1	0
Columbia University	34	4	0
New York University	6	0	0
University of North Carolina	1	0	0
University of Cincinnati	1	0	0
Scio College (Ohio)	1	0	0
Ohio State University	0	1	0
Bryn Mawr College	0	2	0
Temple College	1	0	0
University of Pennsylvania	24	2	0
Villanova College	1	0	0
Washington and Jefferson College	0	0	1
Brown University	2	0	0
University of South Dakota	0	0	1
Paul Quinn College	0	0	1
University of Virginia	1	0	0
Washington and Lee University	1	0	0
University of Wisconsin	9	0	0
Total	336	25	12

PROPERTY.

The total value of property possessed by the institutions for higher education amounts to $514,840,412, a gain of almost $50,000,000 over the amount for the preceding year. The endowment funds have increased to $234,791,239, and the remainder represents the value of the material equipment used for instruction purposes. There are 41 institutions that have endowment funds of over $1,000,000 each, of which number 24 are in the North Atlantic Division, 10 in the North Central Division, 3 in the South Central Division, and 2 each in the South Atlantic and Western divisions.

The endowment funds are increasing at a very gratifying rate, having grown from $166,193,529 in 1900 to $234,791,239 in 1905, a gain of 41.3 per cent in the last five years.

INCOME.

The total income from all sources, excluding benefactions, amounted to $41,775,101, an increase of $1,445,908 over that for the preceding year. Of the entire amount, 36.9 per cent was derived from tuition and other fees from students, 23.6 per cent from endowment funds, 23.6 per cent from State appropriations, 6.9 per cent from Federal appropriations, and 9 per cent from miscellaneous sources. Two institutions, Harvard and Columbia, report incomes exceeding $1,000,000 each, 8 others report over $750,000 each, 3 others over $500,000, and 12 others over $300,000. Included in the 25 institutions having the largest income are 12 State institutions, 5 of which report incomes exceeding $500,000 each.

STATE TAXATION FOR HIGHER EDUCATION.

In a large majority of the States the aid granted by the State to institutions of learning is by special appropriations by the State legislature. In a number of the States, however, provision for educational institutions has been made by means of a regular tax levy on each dollar of the assessed valuation of the taxable property. The rate of taxation for each institution in such States is as follows:

Arizona.—Three-fifths mill tax for the University of Arizona.

California.—One-fifth mill tax for the University of California.

Colorado.—Two-fifths mill tax for the University of Colorado; one-fifth mill tax for the State School of Mines; one-fifth mill tax for the State Agricultural College.

Indiana.—One-tenth mill tax for Indiana University; one-tenth mill tax for Purdue University.

Kentucky.—One-twentieth mill tax on the property of the white people for the Agricultural and Mechanical College of Kentucky.

Michigan.—One-fourth mill tax for the University of Michigan; one-tenth mill tax, but not to exceed $100,000 in any one year, for the State Agricultural College.

Minnesota.—Twenty-three one-hundredths mill tax for the University of Minnesota.

Nebraska.—One mill tax for the University of Nebraska.

North Dakota.—Two-fifths mill tax for the University of North Dakota; one-fifth mill tax for the North Dakota Agricultural College; three one-hundredths mill tax for the School of Forestry.

Ohio.—Fifteen one-hundredths mill tax for Ohio State University; seven two-hundredths mill tax for Ohio University; one-fortieth mill tax for Miami University; one one-hundredth mill tax for Wilberforce University.

Wisconsin.—Two-sevenths mill tax for the University of Wisconsin.

Wyoming.—Three-eighths mill tax for the University of Wyoming.

In 1903 and again in 1905 the State of California, in addition to the regular tax levy, appropriated $100,000 for maintenance and support of the State University for each of two years. In 1904 Kentucky passed an act granting to the Agricultural and Mechanical College $15,000 annually, in addition to the amount derived from the tax levy.

Alabama grants to the Alabama Polytechnic Institute one-third of the net proceeds arising from the sale of fertilizer tags, and South Carolina grants to the Clemson Agricultural College the entire proceeds of the fertilizer tax.

BENEFACTIONS.

The total amount of benefactions reported by 330 of the institutions included in this chapter is $16,678,952, of which sum $11,869,083, or 71 per cent of the total, was reported by 33 institutions receiving each $100,000 or over. The average amount received by the other 297 institutions reporting benefactions was $16,195. The insti-

tutions reporting gifts of $100,000 or over with the amount received by each are as follows:

University of California	$303,377
Yale University	1,397,200
Catholic University of America	267,233
University of Chicago	579,873
Northwestern University (Illinois)	243,019
McKendree College	100,000
Cornell College	114,274
Berea College	141,286
Massachusetts Institute of Technology	115,303
Harvard University	2,330,428
Radcliffe College	117,500
Mount Holyoke College	276,000
Creighton University	144,000
Dartmouth College	110,000
Princeton University	214,606
Cornell University	245,371
Columbia University	1,180,406
Vassar College	160,120
Syracuse University	122,623
Rensselaer Polytechnic Institute	348,372
Ohio State University	102,025
Denison University	125,000
Oberlin College	277,300
Dickinson College	130,000
University of Pennsylvania	833,897
Swarthmore College	100,000
Washington and Jefferson College	169,110
Brown University	458,760
Maryville College	112,000
Norwich University	100,000
University of Virginia	725,000
Lawrence University	120,000
Beloit College	105,000
Total	11,869,083

TABLE 1.—*Number of undergraduate and graduate students in public universities, colleges, and schools of technology.*

State or Territory.	Collegiate departments.			Graduate departments.						Total number of undergraduate and graduate students.		
				Resident.			Nonresident.					
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women	Total.
United States.	34,932	9,991	44,923	1,153	612	1,765	119	17	136	36,204	10,620	46,824
N. Atlantic Division	5,151	129	5,280	16	1	17	5	1	6	5,172	131	5,303
S. Atlantic Division	6,241	400	6,641	102	6	108	12	0	12	6,355	406	6,761
S. Central Division	3,588	780	4,368	73	22	95	25	2	27	3,686	804	4,490
N Central Division	15,869	6,354	22,043	753	410	1,163	70	12	82	16,512	6,776	23,288
Western Division	4,263	2,328	6,591	209	173	382	7	2	9	4,479	2,503	6,982
N. Atlantic Division:												
Maine	397	20	417	7	0	7	5	1	6	409	21	430
New Hampshire	152	7	159	0	0	0	0	0	0	152	7	159
Vermont	265	55	320	1	0	1	0	0	0	266	55	321
Massachusetts	179	5	184	7	1	8	0	0	0	186	6	192
Rhode Island	45	13	58	0	0	0	0	0	0	45	13	58
Connecticut	101	22	123	0	0	0	0	0	0	101	22	123
New York	1,203	0	1,203	0	0	0	0	0	0	1,203	0	1,203
New Jersey	0	0	0	0	0	0	0	0	0	0	0	0
Pennsylvania	2,809	7	2,816	1	0	1	0	0	0	2,810	7	2,817
S. Atlantic Division:												
Delaware	150	23	173	1	0	1	0	0	0	151	23	174
Maryland	995	0	995	5	0	5	0	0	0	1,000	0	1,000
Dist of Columbia	90	46	136	2	3	5	0	0	0	92	49	141
Virginia	1,543	0	1,543	53	0	53	2	0	2	1,598	0	1,598
West Virginia	418	251	669	2	0	2	0	0	0	420	251	671
North Carolina	1,005	4	1,009	28	2	30	10	0	10	1,043	6	1,049
South Carolina	991	16	1,007	9	1	10	0	0	0	1,000	17	1,017
Georgia	903	1	904	2	0	2	0	0	0	905	1	906
Florida	146	59	205	0	0	0	0	0	0	146	59	205
S. Central Division												
Kentucky	324	45	369	15	5	20	0	0	0	339	50	389
Tennessee	268	130	398	4	4	8	0	0	0	272	134	406
Alabama	581	66	647	18	1	19	0	0	0	599	67	666
Mississippi	654	75	729	15	0	15	22	2	24	691	77	768
Louisiana	322	0	322	3	1	4	0	0	0	325	1	326
Texas	883	297	1,180	12	10	22	0	0	0	895	307	1,202
Arkansas	331	69	400	3	1	4	3	0	3	337	70	407
Oklahoma	225	98	323	3	0	3	0	0	0	228	98	326
Indian Territory	0	0	0	0	0	0	0	0	0	0	0	0
N. Central Division												
Ohio	2,017	673	2,690	56	53	111	0	0	0	2,075	726	2,801
Indiana	2,128	569	2,697	78	29	107	7	0	7	2,213	598	2,811
Illinois	1,561	535	2,116	59	18	77	44	5	49	1,664	558	2,242
Michigan	2,402	796	3,198	74	30	104	6	0	6	2,482	826	3,308
Wisconsin	1,964	715	2,679	119	29	148	0	0	0	2,083	744	2,827
Minnesota	1,031	788	1,819	65	42	107	10	6	16	1,106	836	1,942
Iowa	1,222	412	1,634	107	68	175	0	0	0	1,329	480	1,809
Missouri	1,059	415	1,474	62	18	80	0	0	0	1,121	433	1,554
North Dakota	142	54	196	10	1	11	0	0	0	152	55	207
South Dakota	237	117	354	10	6	16	1	1	2	248	124	372
Nebraska	773	672	1,445	62	63	125	0	0	0	835	735	1,570
Kansas	1,133	608	1,741	49	53	102	2	0	2	1,184	661	1,845
Western Division												
Montana	224	101	322	9	1	10	2	0	2	232	102	334
Wyoming	40	22	62	1	1	2	1	0	1	42	23	65
Colorado	736	297	1,033	19	15	34	2	1	3	757	313	1,070
New Mexico	86	19	105	7	2	9	0	0	0	93	21	114
Arizona	21	12	33	4	2	6	0	0	0	25	14	39
Utah	336	178	514	2	0	2	0	0	0	338	178	516
Nevada	103	75	178	1	2	3	0	0	0	104	77	181
Idaho	121	52	173	0	1	1	0	0	0	121	53	174
Washington	592	351	943	20	36	56	0	0	0	612	389	1,001
Oregon	557	204	761	6	9	15	1	1	2	564	214	778
California	1,450	1,017	2,467	140	102	242	1	0	1	1,591	1,119	2,710

TABLE 2.—*Number of undergraduate and graduate students in private universities, colleges, and schools of technology.*

State or Territory.	Collegiate departments.			Graduate departments.						Total number of undergraduate and graduate students.		
				Resident.			Nonresident.					
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
United States	52,298	33,567	85,865	3,778	1,392	5,170	572	113	685	56,648	35,072	91,720
N. Atlantic Division	25,385	9,437	34,822	2,143	659	2,802	318	72	390	27,846	10,168	38,014
S. Atlantic Division	4,760	6,873	11,633	356	44	399	23	0	23	5,139	6,917	12,065
S. Central Division	4,365	5,602	9,967	123	109	232	39	5	44	4,527	5,716	10,243
N. Central Division	15,019	10,058	25,077	1,005	498	1,503	158	34	192	16,182	10,590	26,772
Western Division	2,769	1,597	4,366	152	82	234	34	2	36	2,955	1,681	4,636
N. Atlantic Division:												
Maine	611	288	899	0	7	7	0	0	0	611	295	906
New Hampshire	879	0	879	21	0	21	15	0	15	915	0	915
Vermont	201	53	254	0	0	0	0	0	0	201	53	254
Massachusetts	6,097	4,127	10,224	497	94	591	104	23	127	6,698	4,244	10,942
Rhode Island	681	203	884	47	28	75	13	16	29	741	247	988
Connecticut	2,560	26	2,586	271	37	308	62	0	62	2,893	63	2,956
New York	7,032	3,146	10,178	961	383	1,344	21	3	24	8,014	3,532	11,546
New Jersey	2,014	0	2,014	93	0	93	0	0	0	2,107	0	2,107
Pennsylvania	5,310	1,594	6,904	253	110	363	103	30	133	5,666	1,734	7,400
S. Atlantic Division:												
Delaware	0	0	0	0	0	0	0	0	0	0	0	0
Maryland	727	711	1,438	197	2	199	2	0	2	926	713	1,639
Dist. of Columbia	455	284	739	130	10	140	1	0	1	586	294	880
Virginia	904	1,294	2,198	16	10	26	0	0	0	920	1,304	2,224
West Virginia	155	65	220	0	0	0	0	0	0	155	65	220
North Carolina	1,123	1,123	2,246	2	4	6	3	0	3	1,128	1,127	2,255
South Carolina	619	1,252	1,871	4	7	11	16	0	16	639	1,259	1,898
Georgia	711	2,104	2,815	6	10	16	1	0	1	718	2,114	2,832
Florida	66	40	106	0	1	1	0	0	0	66	41	107
S. Central Division:												
Kentucky	696	1,216	1,912	11	6	17	5	0	5	712	1,222	1,934
Tennessee	1,168	1,204	2,372	38	27	65	5	2	7	1,211	1,233	2,444
Alabama	435	813	1,248	19	9	28	0	0	0	454	822	1,276
Mississippi	367	925	1,292	1	28	29	4	0	4	372	953	1,325
Louisiana	475	375	850	50	34	84	13	0	13	538	409	947
Texas	984	810	1,774	4	5	9	12	3	15	980	818	1,798
Arkansas	246	248	494	0	0	0	0	0	0	246	248	494
Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0
Indian Territory	14	11	25	0	0	0	0	0	0	14	11	25
N. Central Division:												
Ohio	3,416	2,049	5,465	64	30	94	38	8	46	3,518	2,087	5,605
Indiana	1,622	685	2,307	11	9	20	1	1	2	1,634	695	2,329
Illinois	3,949	2,824	6,773	784	401	1,185	52	5	57	4,785	3,230	8,015
Michigan	594	416	1,010	2	0	2	24	8	32	620	424	1,044
Wisconsin	684	378	1,062	0	3	3	5	1	6	689	382	1,071
Minnesota	626	325	951	3	0	3	9	5	14	638	330	968
Iowa	1,406	1,125	2,531	25	17	42	17	4	21	1,448	1,146	2,594
Missouri	1,176	1,086	2,262	82	31	113	10	0	10	1,268	1,117	2,385
North Dakota	37	34	71	0	0	0	0	0	0	37	34	71
South Dakota	103	59	162	0	1	1	0	0	0	103	60	163
Nebraska	473	365	838	24	3	27	0	1	1	497	369	866
Kansas	943	712	1,655	10	3	13	2	1	3	955	716	1,671
Western Division.												
Montana	0	0	0	0	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	0	0	0	0	0
Colorado	425	368	793	64	35	99	3	1	4	492	404	896
New Mexico	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0
Utah	37	29	66	0	0	0	0	0	0	37	29	66
Nevada	0	0	0	0	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0	0	0	0	0	0
Washington	272	100	372	23	2	25	1	1	2	296	103	399
Oregon	162	155	317	0	3	3	0	0	0	162	158	320
California	1,873	945	2,818	65	42	107	30	0	30	1,968	987	2,955

TABLE 3.—*Undergraduate students in universities and colleges for men and for both sexes.*

State or Territory.	Number of institutions.	Colleges for men.		Colleges for both sexes.			
		Institutions.	Undergraduate students.	Institutions.	Undergraduate students.		
					Men.	Women.	Total.
United States	453	131	26,996	322	45,507	25,042	70,549
North Atlantic Division	84	46	16,850	38	10,121	3,224	13,345
South Atlantic Division	72	30	3,768	42	3,498	1,368	4,866
South Central Division	72	17	2,062	55	4,537	2,382	6,919
North Central Division	187	32	3,445	155	22,526	14,566	37,092
Western Division	38	6	851	32	4,825	3,502	8,327
North Atlantic Division:							
Maine	4	1	280	3	726	284	1,012
New Hampshire	2	2	879	0	0	0	0
Vermont	3	1	120	2	346	108	454
Massachusetts	10	6	3,844	[a]4	436	405	841
Rhode Island	1	0	0	1	681	203	884
Connecticut	3	2	2,204	1	266	26	292
New York	23	16	3,418	7	3,930	1,395	5,325
New Jersey	5	5	1,630	0	0	0	0
Pennsylvania	33	■	4,385	20	3,734	803	4,537
South Atlantic Division.							
Delaware	2	1	120	1	30	23	53
Maryland	10	6	597	4	130	96	226
District of Columbia	7	4	147	3	398	247	645
Virginia	11	7	[b]1,181	4	315	57	372
West Virginia	4	0	0	4	573	316	889
North Carolina	13	4	657	9	870	236	1,106
South Carolina	9	2	189	7	744	82	826
Georgia	11	4	760	7	343	212	555
Florida	3	2	117	3	95	99	194
South Central Division:							
Kentucky	10	3	328	7	992	441	1,433
Tennessee	22	3	247	19	1,189	630	1,819
Alabama	5	3	311	2	335	59	394
Mississippi	4	1	248	3	316	75	391
Louisiana	7	4	752	3	45	17	62
Texas	14	3	198	11	1,269	862	2,131
Arkansas	7	0	0	7	577	247	824
Oklahoma	1	0	0	1	100	40	140
Indian Territory	2	0	0	2	14	11	25
North Central Division.							
Ohio	■	6	570	29	4,443	2,481	6,924
Indiana	14	5	707	9	1,412	1,212	2,624
Illinois	20	6	723	23	4,213	3,069	7,282
Michigan	9	1	86	8	2,183	1,037	3,220
Wisconsin	10	2	259	8	2,389	1,005	3,394
Minnesota	9	2	201	7	1,456	1,113	2,569
Iowa	25	3	205	22	1,665	1,412	3,077
Missouri	19	4	304	15	1,841	965	2,798
North Dakota	3	0	0	3	131	57	188
South Dakota	5	0	0	5	183	122	305
Nebraska	10	1	86	9	1,160	1,037	2,197
Kansas	19	2	154	17	1,450	1,066	2,516
Western Division:							
Montana	1	0	0	1	69	48	117
Wyoming	1	0	0	1	40	22	62
Colorado	4	1	50	3	678	619	1,297
New Mexico	1	0	0	1	7	13	20
Arizona	1	0	0	1	21	12	33
Utah	2	0	0	2	267	170	437
Nevada	1	0	0	1	102	76	178
Idaho	1	0	0	1	121	52	173
Washington	6	1	160	5	488	394	882
Oregon	8	0	0	8	349	243	592
California	12	4	841	8	2,682	1,854	4,536

[a] Includes Clark University, which has no undergraduate department.
[b] Includes 3 special women students in Randolph-Macon College.

TABLE 4.—*Classification of universities and colleges for men and for both sexes according to number of undergraduate students.*

State or Territory.	Institutions.	Institutions having—																	
		Less than 10.	10 to 24.	25 to 49.	50 to 74.	75 to 99.	100 to 149.	150 to 199.	200 to 249.	250 to 299.	300 to 399.	400 to 499.	500 to 599.	600 to 699.	700 to 799.	800 to 899.	1,000 to 1,199.	1,200 to 1,499.	1,500 to 1,749.	Over 1,750.
United States	453	8	45	76	59	43	60	37	31	20	18	8	6	7	3	3	1	8	8	10
North Atlantic Division	84	1	5	7	6	12	8	6	10	6	5	3	2	2	1	2	.	8	..	4
South Atlantic Division	72	2	10	13	11	5	11	6	7	2	2	1	1	1	.	.	.	.	.	.
South Central Division	72	3	7	15	8	6	16	4	1	6	3	1	1	.	1	.	.	.	.	.
North Central Division	187	1	18	36	27	19	30	16	10	6	5	3	1	3	1	1	1	3	1	5
Western Division	38	1	5	5	7	1	4	5	3	.	3	.	1	1	.	.	.	1	.	1
North Atlantic Division																				
Maine	4	.	.	.	.	.	.	.	1	1	1	1	.	.	.	.	.	.	.	.
New Hampshire	2	.	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
Vermont	3	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.
Massachusetts	10	1	1	.	.	1	1	.	1	.	2	1	.	.	.	.	.	.	.	1
Rhode Island	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.
Connecticut	3	.	.	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.	.	1
New York	23	.	1	2	2	5	2	2	2	2	.	.	1	.	1	.	.	2	.	1
New Jersey	5	.	2	.	.	1	.	.	1	.	.	.	.	.	.	.	.	1	.	.
Pennsylvania	33	.	.	5	4	5	2	4	3	2	2	.	.	2	.	.	.	1	.	1
South Atlantic Division:																				
Delaware	2	.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Maryland	10	.	2	2	2	.	2	2	.	.	.	.	.	.	.	.	.	.	.	.
District of Columbia	7	1	1	1	1	2	.	.	.	.	.	.	1	.	.	.	.	.	.	.
Virginia	11	.	1	2	1	1	2	1	1	1	1	.	.	.	.	.	.	.	.	.
West Virginia	4	.	2	.	.	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.
North Carolina	13	.	1	2	4	.	1	1	3	.	.	1	.	.	.	.	.	.	.	.
South Carolina	9	.	2	1	1	.	3	.	1	1	.	.	.	.	.	.	.	.	.	.
Georgia	11	1	1	2	1	1	1	1	2	.	1	.	.	.	.	.	.	.	.	.
Florida	5	.	.	3	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
South Central Division:																				
Kentucky	10	.	1	1	1	.	3	2	.	1	1	.	.	.	.	.	.	.	.	.
Tennessee	22	1	2	5	4	2	5	1	.	1	1	.	.	.	.	.	.	.	.	.
Alabama	5	.	.	1	.	.	3	.	.	1	.	.	.	.	.	.	.	.	.	.
Mississippi	4	1	.	.	.	.	1	.	1	1	.	.	.	.	.	.	.	.	.	.
Louisiana	7	1	.	3	.	1	.	.	.	1	1	.	.	.	.	.	.	.	.	.
Texas	14	.	.	3	2	3	3	1	.	.	.	.	1	.	1	.	.	.	.	.
Arkansas	7	.	2	2	1	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.
Oklahoma	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Indian Territory	2	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
North Central Division:																				
Ohio	35	1	2	5	4	5	5	4	1	1	1	1	1	3	.	.	.	1	1	.
Indiana	14	.	1	3	1	2	1	1	.	2	.	2	.	.	.	.	.	1	.	.
Illinois	29	.	2	6	5	1	7	3	1	1	.	.	.	.	.	1	.	.	.	2
Michigan	9	.	.	1	1	1	2	2	1	.	.	.	.	.	.	.	.	.	.	1
Wisconsin	10	.	.	3	1	1	1	1	2	.	.	.	.	.	.	.	.	.	.	1
Minnesota	9	.	1	1	2	.	1	1	1	1	.	.	.	.	.	.	.	.	.	1
Iowa	25	.	5	6	3	1	4	1	1	.	3	.	.	.	1	.	.	.	.	.
Missouri	19	.	1	5	2	2	5	2	.	1	.	.	.	.	.	.	.	1	.	.
North Dakota	3	.	1	.	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
South Dakota	5	.	2	.	2	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Nebraska	10	.	.	3	1	2	1	1	1	.	.	.	.	.	.	.	.	1	.	.
Kansas	19	.	3	3	4	4	1	.	2	.	1	.	.	.	.	1	.	.	.	.
Western Division:																				
Montana	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Wyoming	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Colorado	4	.	.	.	1	.	.	.	.	.	2	.	1	.	.	.	.	.	.	.
New Mexico	1	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Arizona	1	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Utah	2	.	.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
Nevada	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
Idaho	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
Washington	6	.	1	1	1	1	.	1	.	.	.	.	.	1	.	.	.	.	.	.
Oregon	8	.	1	3	3	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
California	12	1	2	.	.	.	3	2	2	.	.	.	.	.	.	.	.	1	.	1

TABLE 5.—*Classification of universities and colleges for men and for both sexes according to amount of endowment funds.*

State or Territory.	Institutions.	Institutions having—																						
		No endowment funds.	$1 to $4,999	$5,000 to $9,999.	$10,000 to $14,999	$15,000 to $24,999	$25,000 to $49,999	$50,000 to $99,999.	$100,000 to $199,999.	$200,000 to $299,999.	$300,000 to $399,999.	$400,000 to $499,999.	$500,000 to $599,999.	$600,000 to $699,999.	$700,000 to $799,999.	$800,000 to $899,999	$900,000 to $999,999	$1,000,000 to $1,249,999	$1,250,000 to $1,499,999	$1,500,000 to $1,999,999	$2,000,000 to $2,999,999	$3,000,000 to $4,999,999	$5,000,000 to $7,499,999	$7,500,000 to $9,500,000	Over $12,500,000.
United States	453	129	11	13	7	14	37	48	37	38	20	16	11	8	3	2	4	6	6	5	7	4	1	3	3
North Atlantic Division	84	18	..	2	1	1	5	4	8	3	3	9	3	2	2	1	2	3	3	3	6	..	1	2	2
South Atlantic Division	72	26	..	6	1	2	5	7	10	8	2	..	1	1	..	1	..	1	..	..	..	1	..	..	..
South Central Division	72	34	1	..	1	2	6	5	9	2	4	1	2	2	..	..	..	..	..	..	..	..	..	..	..
North Central Division	187	39	7	4	4	8	17	29	25	22	9	5	4	3	1	..	2	1	2	2	..	2	..	1	..
Western Division	38	12	3	1	..	1	4	3	5	3	2	1	1	..	..	..	..	..	..	..	1	..	..	..	1
North Atlantic Division:																									
Maine	4	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..
New Hampshire	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Vermont	3	..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Massachusetts	10	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	2	2	2	..	..	..	..	1
Rhode Island	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Connecticut	3	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	1	..	..
New York	23	7	..	..	..	1	1	1	1	..	1	3	1	1	..	1	..	1	..	1	1	..	..	1	1
New Jersey	5	3	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..
Pennsylvania	33	6	..	..	1	..	3	3	7	2	2	3	1	..	1	..	1	2	..	..	..	..	..	1	..
South Atlantic Division:																									
Delaware	2	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maryland	10	6	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
District of Columbia	7	4	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Virginia	11	1	..	1	..	..	1	2	2	1	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..
West Virginia	4	2	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Carolina	13	2	..	3	..	1	2	1	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
South Carolina	9	4	..	..	..	..	1	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Georgia	11	5	..	..	1	1	..	1	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Florida	5	1	..	..	..	..	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Central Division:																									
Kentucky	10	2	..	..	..	..	..	1	2	1	2	..	2	..	..	..	..	..	..	..	1	1	..	..	..
Tennessee	22	8	1	..	..	1	3	3	2	1	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..
Alabama	5	3	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Mississippi	4	1	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Louisiana	7	4	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Texas	14	10	..	..	..	..	1	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Arkansas	7	3	..	..	1	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oklahoma	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Indian Territory	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Central Division:																									
Ohio	35	8	..	..	..	1	4	4	7	2	2	..	1	1	1	..	1	..	1	2	..	..	..	..	..
Indiana	14	5	..	..	..	..	1	2	..	3	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Illinois	29	5	2	..	..	1	2	5	4	5	1	..	..	2	..	..	..	..	..	..	1	..	..	1	..
Michigan	9	1	..	..	..	..	1	..	1	5	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Wisconsin	10	1	2	..	..	1	..	..	2	1	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..
Minnesota	9	3	..	..	1	1	..	1	..	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Iowa	25	2	1	2	2	1	1	7	4	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Missouri	19	4	..	..	1	1	1	4	2	2	1	1	..	..	..	..	..	1	..	..	1	..	..	..	..
North Dakota	3	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
South Dakota	5	2	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nebraska	10	2	1	1	..	..	1	2	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Kansas	19	6	1	1	..	1	4	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Western Division:																									
Montana	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Wyoming	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colorado	4	2	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
New Mexico	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arizona	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Utah	2	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nevada	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Idaho	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Washington	6	4	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oregon	8	..	3	..	..	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
California	12	4	..	1	..	..	1	1	2	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1

TABLE 6.—*Professors and instructors in universities and colleges for men and for both sexes.*

State or Territory.	Number of institutions.	Preparatory departments.		Collegiate departments.		Professional departments.		Total number (excluding duplicates).	
		Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
United States	453	2,491	1,025	8,738	1,107	5,100	62	15,847	2,247
North Atlantic Division	84	541	107	2,956	92	1,590	11	5,175	241
South Atlantic Division	72	256	104	906	106	534	5	1,600	201
South Central Division	72	285	157	747	109	656	5	1,569	341
North Central Division	187	1,189	540	3,342	614	1,884	36	6,027	1,225
Western Division	38	220	117	787	126	436	5	1,476	239
North Atlantic Division:									
Maine	4	5	0	101	6	46	0	140	6
New Hampshire	2	10	0	66	0	20	0	99	0
Vermont	3	0	0	56	0	33	0	89	0
Massachusetts	10	46	4	537	5	452	6	982	14
Rhode Island	1	0	0	77	3	0	0	77	3
Connecticut	3	0	0	285	2	97	0	388	2
New York	23	264	55	956	29	490	2	1,984	127
New Jersey	5	15	5	168	0	0	0	182	5
Pennsylvania	33	201	43	710	47	452	3	1,234	84
South Atlantic Division:									
Delaware	2	4	1	24	2	0	0	27	2
Maryland	10	59	7	175	15	83	2	282	19
District of Columbia	7	35	6	137	4	296	1	462	14
Virginia	11	25	11	129	4	38	0	183	11
West Virginia	4	16	9	55	14	11	0	83	23
North Carolina	13	36	18	170	15	44	0	232	37
South Carolina	9	22	9	88	16	8	0	105	18
Georgia	11	29	27	80	18	49	2	149	45
Florida	5	30	16	48	18	5	0	77	32
South Atlantic Division:									
Kentucky	10	40	36	104	42	107	0	252	73
Tennessee	22	75	43	188	53	253	2	453	110
Alabama	5	16	0	77	2	35	0	113	2
Mississippi	4	12	7	43	4	15	0	70	15
Louisiana	7	30	13	91	8	65	0	182	24
Texas	14	70	24	156	30	136	3	345	73
Arkansas	7	31	20	56	16	41	0	114	30
Oklahoma	1	5	0	25	0	4	0	33	0
Indian Territory	2	6	14	7	14	0	0	7	14
North Central Division:									
Ohio	35	181	83	581	102	306	1	1,069	210
Indiana	14	69	12	227	29	37	2	289	45
Illinois	29	204	89	639	106	426	15	1,273	245
Michigan	9	57	21	271	28	146	4	405	55
Wisconsin	10	64	12	321	41	14	0	369	51
Minnesota	9	102	31	219	35	208	1	509	86
Iowa	25	130	94	302	80	161	3	485	185
Missouri	19	149	64	299	37	245	0	680	105
North Dakota	3	32	19	32	19	9	0	43	20
South Dakota	5	36	29	51	22	0	0	61	36
Nebraska	10	53	32	167	50	201	3	430	72
Kansas	19	112	54	233	65	131	7	414	115
Western Division:									
Montana	1	5	4	7	3	0	0	10	5
Wyoming	1	6	4	13	5	0	0	13	5
Colorado	4	29	12	113	22	177	1	336	35
New Mexico	1	5	2	7	2	0	0	9	9
Arizona	1	6	3	16	1	0	0	22	4
Utah	2	33	13	45	3	0	0	70	18
Nevada	1	4	5	16	5	0	0	22	11
Idaho	1	3	2	14	3	0	0	17	5
Washington	6	25	14	85	22	5	0	102	30
Oregon	8	30	21	69	33	52	0	128	40
California	12	74	37	402	27	202	4	747	77

TABLE 7.—*Students in universities and colleges for men and for both sexes.*

State or Territory.	Preparatory departments.		Collegiate departments.		Graduate departments.				Professional departments.	
					Resident.		Nonresident.			
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
United States	37,806	16,784	72,800	25,045	4,750	1,694	682	130	31,559	814
North Atlantic Division	8,031	1,339	26,971	3,224	2,112	495	323	73	9,844	227
South Atlantic Division	4,185	1,989	7,263	1,371	425	18	33	0	3,844	45
South Central Division	6,282	3,407	6,610	2,382	173	81	64	7	5,059	89
North Central Division	18,007	7,841	25,071	14,366	1,702	856	221	46	11,693	394
Western Division	3,301	2,208	5,676	3,502	338	242	41	4	1,188	59
North Atlantic Division:										
Maine	9	0	1,008	284	7	1	5	1	203	2
New Hampshire	85	0	579	0	21	0	15	0	60	0
Vermont	0	0	466	108	1	0	0	0	193	0
Massachusetts	543	17	4,280	405	457	14	104	23	2,354	109
Rhode Island	0	0	681	203	47	28	13	16	0	0
Connecticut	0	0	2,500	26	271	37	62	0	469	0
New York	4,778	516	7,348	1,305	[illegible]	398	21	3	4,107	96
New Jersey	260	37	1,030	0	93	0	0	0	32	0
Pennsylvania	2,356	769	8,119	803	254	47	103	30	2,426	20
South Atlantic Division:										
Delaware	30	30	150	23	1	0	0	0	0	0
Maryland	587	74	727	90	197	0	2	0	389	25
District of Columbia	556	90	545	247	192	13	1	0	1,772	18
Virginia	451	162	1,493	60	48	0	0	0	472	0
West Virginia	300	180	573	316	2	0	0	0	220	0
North Carolina	863	602	1,527	236	24	2	13	0	588	0
South Carolina	490	176	933	82	13	1	16	0	66	0
Georgia	612	483	1,103	212	8	1	1	0	309	2
Florida	296	192	212	99	0	1	0	0	37	0
South Central Division:										
Kentucky	1,081	583	1,020	441	26	5	5	0	1,074	6
Tennessee	1,937	1,106	1,436	630	42	26	5	2	1,853	17
Alabama	147	8	646	59	24	1	0	0	241	0
Mississippi	357	281	564	75	7	0	26	2	86	1
Louisiana	555	110	797	17	53	33	13	0	695	21
Texas	1,214	675	1,465	862	15	15	12	3	816	44
Arkansas	679	471	577	247	3	1	3	0	272	0
Oklahoma	135	50	100	40	3	0	0	0	50	0
Indian Territory	177	123	14	11	0	0	0	0	0	0
North Central Division:										
Ohio	2,876	1,344	5 013	2 481	120	83	38	8	1,230	20
Indiana	974	187	2,179	1,212	73	32	1	1	287	8
Illinois	2,348	1,135	4,936	3,069	842	415	96	10	3,702	107
Michigan	474	214	2,209	1,037	73	25	30	8	1,490	48
Wisconsin	754	118	2,648	1,005	119	32	5	1	198	0
Minnesota	1,165	359	1,657	1,113	68	42	19	11	1,111	27
Iowa	1,829	1,434	1,870	1,412	119	85	17	4	994	108
Missouri	2,334	1,051	2 235	955	144	33	10	0	1,407	10
North Dakota	180	139	531	57	5	1	0	0	47	2
South Dakota	575	372	183	122	4	4	1	1	47	1
Nebraska	1,157	404	1,246	1,037	86	66	0	1	619	31
Kansas	1,341	1,084	1,604	1,060	49	40	4	1	455	32
Western Division.										
Montana	43	45	69	[illegible]	5	1	2	0	0	0
Wyoming	26	18	40	22	1	1	1	0	0	0
Colorado	548	358	728	619	81	48	5	2	327	6
New Mexico	34	30	7	13	0	0	0	0	0	0
Arizona	85	70	21	12	4	2	0	0	0	0
Utah	676	693	207	170	0	0	0	0	0	0
Nevada	34	42	103	75	1	2	0	0	0	0
Idaho	105	51	121	52	0	1	0	0	0	0
Washington	401	209	648	394	[illegible]	38	1	1	96	8
Oregon	282	[illegible]	349	243	2	5	1	1	177	16
California	1,167	350	3,323	1,854	205	144	31	0	588	29

TABLE 8.—*Students pursuing various courses in universities and colleges for men and for both sexes.*

State or Territory	Students in undergraduate courses.												College students studying—		Students in pedagogy.		Students in commercial course.				
	Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering.	Chemical engineering.	Mining engineering.	General engineering.	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.	Military drill.	Music.	Art.
United States	70,233	1,415	3,821	5,327	3,000	492	1,637	1,875	471	12	213	1,710	27,447	14,470	3,030	5,900	7,518	2,344	13,708	20,913	5,402
North Atlantic Division	20,471	375	1,958	2,489	1,170	215	539	291	320	3	30	744	8,411	4,071	1,045	801	1,203	474	2,220	1,490	1,144
South Atlantic Division	7,101	220	104	244	116	36	22	88	10		14		3,554	1,779	584	427	554	165	1,335	1,216	328
South Central Division	6,863	87	341	472	176	60	51	93			35	53	3,374	1,574	720	1,004	1,243	418	2,955	2,826	423
North Central Division	29,510	616	953	1,612	1,290	164	404	1,245	133	9	134	787	9,917	5,384	1,398	2,948	3,626	1,109	5,000	13,541	2,807
Western Division	6,282	117	465	510	308	17	621	158	8			126	2,191	1,062	193	668	892	178	1,998	1,847	880
North Atlantic Division:																					
Maine	931	15	38	134	96								375	140	16	3			141		
New Hampshire	868			31								10	151	101	26	9					
Vermont	252	44	14	147	44	45						22	187	48	14	14			283		
Massachusetts	3,972	33	68	133	156	26	66		44				1,061	773	11	33				146	23
Rhode Island	655							124					184	73	56	66					90
Connecticut	1,698	63	90	102	67		45			3			266	157							
New York	5,380	104	1,283	842	341	20	223	47	172			2	309	1,291	514	348	317	8	901	426	866
New Jersey	1,239	12		284	42	26							824	523	14		97		167	10	
Pennsylvania	5,476	14	465	816	424	98	208	120	104		30	712	3,054	1,065	304	337	789	496	728	898	165
South Atlantic Division:																					
Delaware	26	32	9	38	32						14		42	6					153		
Maryland	809		14										398	203	13	43	38	29	302	61	37
District of Columbia	621		17	60	40	16			10				236	111	12	41	20	20	76	102	22
Virginia	1,362			40	17	20	12	88					693	217	158	28	51	8		86	
West Virginia	545	86	45	46									200	119	39	8	61	32	260	253	118
North Carolina	1,603												835	476	106	30	97	27	203	256	36
South Carolina	834		8	7	8								531	286	158	147	43			81	
Georgia	1,063	76		50	18		10						468	234	85	74	74	5	426	117	6
Florida	224	26	11	3	1								151	67	13	66	170	44	225	200	29
South Central Division:																					
Kentucky	962	17	157	75			5						484	190	194	169	83	4	582	197	24
Tennessee	1,673	21	20	61	41	4	6	70			33		841	384	287	529	440	358	429	761	92
Alabama	647			14			8						486	303			125	0	170	54	11
Mississippi	597			29	12		1						198	90	32	41				48	
Louisiana	345	40	140	94	25	49		23			2	53	250	179	14	21	219		816	161	
Texas	1,831			123	62		23						717	299	82	196	300	88	296	961	205
Arkansas	670	9	15	76	36	7	2						363	107	111	105	41	57	537	448	66

Oklahoma	125	.....	9	.....	.....	.....	6	.....	.....	.....	.....	.....	10	6	.....	.....	20	9	.....	113	.....
Indian Territory	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	7	.....	3	5	2	105	65	22
North Central Division:																				
Ohio	5,706	99	112	172	187	26	46	309	15	.....	33	4	2,136	1,033	168	258	522	268	393	2,073	461
Indiana	2,887	.....	17	111	28	.....	.....	.....	3	.....	.....	300	995	551	194	240	113	8	339	820	233
Illinois	4,756	329	246	335	238	26	.....	.....	100	8	98	273	1,415	734	251	764	534	137	1,482	2,873	631
Michigan	2,262	.....	194	187	127	57	.....	392	.....	.....	.....	.....	313	163	44	41	92	73	.....	673	159
Wisconsin	2,258	72	104	136	162	.....	.....	309	.....	.....	.....	210	919	484	68	74	184	39	616	506	38
Minnesota	2,180	29	102	126	161	33	106	10	.....	.....	3	.....	704	340	77	188	226	25	504	445	74
Iowa	3,008	.....	6	156	26	.....	4	.....	.....	.....	.....	.....	1,084	618	240	458	607	138	562	2,101	216
Missouri	2,090	76	66	205	150	8	180	101	15	1	.....	.....	623	371	98	248	296	47	434	597	426
North Dakota	153	.....	20	.....	.....	.....	15	.....	.....	.....	.....	.....	82	20	3	42	97	49	.....	34	38
South Dakota	271	.....	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	70	73	16	118	139	37	91	423	123
Nebraska	1,708	11	35	78	112	4	4	124	.....	.....	.....	.....	522	364	94	254	184	67	497	1,073	159
Kansas	2,231	.....	17	106	99	10	49	.....	.....	.....	.....	.....	1,054	633	135	263	632	221	82	1,923	240
Western Division:																					
Montana	95	.....	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	5	0	15	.....	.....	.....	60	45
Wyoming	23	8	3	.....	.....	.....	12	.....	.....	.....	.....	.....	.....	.....	0	46	22	18	150	31	.....
Colorado	1,075	.....	16	54	106	13	12	9	.....	.....	.....	.....	209	140	59	91	102	.....	.....	121	4
New Mexico	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	4	0	8	3	9	.....	52	.....
Arizona	12	.....	.....	2	.....	.....	11	1	.....	.....	.....	.....	5	2	4	1	12	17	62	.....	.....
Utah	258	.....	.....	6	.....	.....	.....	148	.....	.....	.....	.....	118	25	30	89	76	42	.....	120	106
Nevada	55	1	26	7	.....	.....	44	.....	.....	.....	.....	1	28	4	1	37	14	30	132	5	.....
Idaho	63	2	28	11	28	.....	41	.....	.....	.....	.....	.....	18	5	3	2	.....	.....	192	19	.....
Washington	847	.....	32	41	34	4	55	.....	.....	.....	.....	.....	384	246	21	81	177	39	203	414	62
Oregon	453	.....	1	26	20	.....	17	.....	.....	.....	.....	.....	170	65	7	7	92	25	.....	466	53
California	3,386	106	337	363	120	.....	429	.....	8	.....	.....	125	1,178	566	68	289	394	28	1,259	559	580

TABLE 9.—*Degrees conferred on men by universities and colleges for men and for both sexes.*

State or Territory.	A. B.	B. S.	Ph. B.	B. L.	B. C. E.	B. M. E.	B. E. E.	B. F. M.	B. E.	Met. E.	A. C.	B. Arch.	B. Agr.	B. S. A.	B. L. S.	B. Mus.	B. Ped.	D. V. M.	B. O.	B. F. A.	B. C. S.	B. Acc'ts.	B. Pharm.
United States	5,647	2,270	700	103	19	30	1	2	24	4	10	18	4	27	2	9	17	2	2	1	17	57	2
North Atlantic Division	2,543	934	409	16						4	3	18		19		4				1	15		2
South Atlantic Division	603	158	39	3										1			1					5	
South Central Division	301	185	21	13	15	28		2	24				4	4									
North Central Division	1,914	800	228	27							7			6	2	4	16	2	2		2	50	
Western Division	283	193	3	38	4	2	1									1						2	
North Atlantic Division:																							
Maine	111	76																					
New Hampshire	90	50		3																			
Vermont	17	38	4																			1	
Massachusetts	754	166		1						1				1									
Rhode Island	61		56																				
Connecticut	302	10	182													2				1			
New York	507	153	79	2						1		18		18		1					15		2
New Jersey	196	77		10																			
Pennsylvania	505	366	88							2	3					1							
South Atlantic Division:																							
Delaware	6	22																					
Maryland	94	7																					
District of Columbia	38	20	3																				
Virginia	119	14		1																			
West Virginia	30	8		2										1									
North Carolina	137	28	21																				
South Carolina	96	15	1																				
Georgia	77	36	13														1					5	
Florida	6	8																					
South Central Division																							
Kentucky	52	17		10	9	27		2					4										
Tennessee	93	42	2						7														
Alabama	34	21	1																				
Mississippi	16	13	11																				
Louisiana	33	33							17														
Texas	42	39	7																				
Arkansas	32	11		3	6	1								1									
Oklahoma	2	4																					
Indian Territory		2																				1	
North Central Division:																							
Ohio	380	87	42	21													2		1				
Indiana	162	34	25	2														1					
Illinois	359	175	21	1											2				1		2		
Michigan	216	91	2													1							
Wisconsin	175	125	12																				
Minnesota	123	21	12								7			6								47	
Iowa	116	77	79													2	6	1					
Missouri	139	101	11	2														1					
North Dakota	9	3																					
South Dakota	20	4	2																				
Nebraska	91	44	1																			2	
Kansas	118	32	21	1												1	8					1	
Western Division																							
Montana	5	2																					
Wyoming	3	3																					
Colorado	47	15	3													1							
New Mexico	1																						
Arizona																							
Utah	7	12																					
Nevada	1	14																					
Idaho	2				4	2	1																
Washington	25	9																					
Oregon	24	8																				2	
California	168	130		37																			

TABLE 10.—*Degrees conferred on men by universities and colleges for men and for both sexes.*

State or Territory.	A. M.	M. S	M. L	Ph. M	C. E.	M. E	E. E.	F. M	M. M. E.	M. Ped	M. Acc'ts.	M. F.	M. Arch.	Mus. D.	Sc. D.	Ph. D.	M. C. S	M. C. E.	Ped. D	L. I.
United States	1,205	111	11	10	276	320	109	89	9	15	96	24	1	1	3	336	7	3	6	31
N. Atlantic Division	674	51	.	5	192	233	84	56	9	15	12	24	.	.	2	194	7	3	6	...
S. Atlantic Division	93	13	.	1	6	3	2	.	...	...	4	...	...	...	...	46	...	...	...	30
S. Central Division	65	7	.	1	24	2	3	1	...	...	8	...	...	...	...	...	...	...	...	1
N. Central Division	227	33	9	3	54	69	20	32	...	...	72	...	1	1	1	88	...	...	...	...
Western Division	46	7	2	..	..	..	...	.	.	..	.	.	.	.	..	8	.	.	..	..
N. Atlantic Division																				
Maine	2	2	..	..	1	2	2	..	..	....	..	....	..	..	..	..	..	..	..	..
New Hampshire	9	..	..	....	6	..	..	..	..	..	..	..	..	..	..	..	7	..	..	..
Vermont	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Massachusetts	160	6	..	..	..	..	..	..	..	..	..	....	..	..	..	71	..	..	..	..
Rhode Island	29	2	..	..	5	5	3	..	..	..	..	..	..	..	..	2	..	..	..	..
Connecticut	59	5	..	..	..	2	..	..	..	..	..	24	..	..	..	31	..	..	..	..
New York	237	18	..	5	88	211	41	47	9	15	....	..	..	..	1	60	..	3	6	..
New Jersey	57	1	..	..	31	..	3	..	..	..	5	....	..	..	1	4	..	..	..	..
Pennsylvania	140	15	..	..	61	33	35	9	..	..	7	....	..	..	..	26	..	..	..	..
S. Atlantic Division																				
Delaware	..	4	..	....	..	..	..	..	..	..	..	....	..	..	..	..	..	..	..	..
Maryland	28	..	....	..	..	..	..	..	..	..	..	....	..	..	..	16	..	..	..	..
Dist. of Columbia	15	7	.	1	2	3	1	..	..	..	..	....	..	..	..	7	..	..	..	..
Virginia	27	..	..	..	3	..	1	..	..	..	..	..	..	..	..	2	..	..	..	12
West Virginia	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Carolina	16	..	..	..	..	..	..	..	..	..	4	..	..	..	..	1	..	..	..	..
South Carolina	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
Georgia	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Florida	...	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
S. Central Division																				
Kentucky	17	4	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Tennessee	17	1	..	..	3	1	..	..	..	..	2	..	..	..	..	..	..	..	..	1
Alabama	10	1	..	..	2	..	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Mississippi	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana	4	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Texas	9	..	..	1	15	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Arkansas	..	..	..	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Oklahoma	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Indian Territory	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
N. Central Division:																				
Ohio	67	..	..	..	24	40	2	11	..	..	..	..	..	1	..	2	..	..	..	..
Indiana	47	..	..	..	4	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Illinois	77	15	..	2	..	4	1	..	..	..	3	..	1	..	..	3	..	..	..	..
Michigan	20	7	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..
Wisconsin	26	1	..	..	4	2	..	..	..	..	..	..	..	..	..	9	..	..	..	..
Minnesota	7	2	9	..	18	14	17	15	..	..	20	..	..	..	..	3	..	..	..	..
Iowa	24	6	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..
Missouri	26	..	..	..	3	6	....	2	..	..	24	..	..	..	..	2	..	..	..	..
North Dakota	..	..	..	....	..	2	..	4	..	..	..	..	..	..	..	..	..	..	..	..
South Dakota	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nebraska	7	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..
Kansas	15	2	..	1	..	..	..	..	..	..	24	..	..	..	1	3	..	..	..	..
Western Division																				
Montana	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wyoming	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colorado	15	2	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..
New Mexico	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arizona	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Utah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nevada	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Idaho	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Washington	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oregon	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
California	21	4	2	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..

TABLE 11.—*Degrees conferred on women by coeducational universities and colleges.*

State or Territory.	A. B.	B. S.	Ph. B.	D. L.	H. L. S.	D. Mus.	B. Ped.	B. S. A.	B. Di.	H. C. E.	H. C.	A. M.	M. E.	Ph. M.	M. L.	M. Ped.	Ph. D.	Ped. D.	L. I.	B. Arch.	B. S. D.	C. E.	B. Paint.
United States	2,193	329	364	252	18	93	35	2	6	1	8	270	23	6	4	5	22	3	21	5	3	1	2
North Atlantic Division	369	105	93	8	..	18	..	1	..	1	4	98	2	3	..	4	13	3	..	..	..	1	2
South Atlantic Division	53	16	8	5	..	..	6	..	..	..	..	8	..	..	..	..	..	..	31	..	..	..	..
South Central Division	93	30	6	25	..	14	..	..	..	..	2	12	7	..	..	..	..	..	..	..	..	..	..
North Central Division	1,433	133	244	81	16	51	17	1	6	..	2	115	11	3	1	1	8	..	..	4	2	..	..
Western Division	254	35	3	134	..	10	12	..	..	..	..	27	3	..	3	..	1	..	..	1	1	..	..
North Atlantic Division:																							
Maine	42	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Hampshire	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Vermont	16	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Massachusetts	60	2	2	1	..	..	..	..	..	..	..	8	..	..	..	..	1	..	..	..	..	..	..
Rhode Island	23	..	17	..	..	..	..	..	..	..	..	8	..	..	..	..	..	..	..	..	..	..	..
Connecticut	1	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..
New York	149	73	36	3	..	11	..	1	..	1	..	71	1	3	..	4	5	3	..	..	..	1	2
New Jersey	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pennsylvania	69	29	28	4	..	7	..	..	..	..	4	11	1	..	..	..	2	..	..	..	..	..	..
South Atlantic Division:																							
Delaware	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maryland	13	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
District of Columbia	8	1	..	..	..	..	1	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..
Virginia	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
West Virginia	6	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Carolina	12	4	7	3	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
South Carolina	3	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	..	..	..	..
Georgia	8	6	..	..	..	..	5	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Florida	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Central Division																							
Kentucky	17	5	1	6	..	..	..	..	..	..	..	1	3	..	..	..	..	..	1	..	..	..	..
Tennessee	28	17	..	..	..	10	..	..	..	..	..	4	1	..	..	..	..	..	..	..	..	..	..
Alabama	11	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Mississippi	2	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Louisiana	1	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..	..	..	..	..	..	..
Texas	23	12	2	16	..	1	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..
Arkansas	9	1	..	3	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Oklahoma	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Indian Territory	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Central Division																							
Ohio	212	21	38	38	..	11	..	..	..	..	1	15	3	1	..	1	1	..	..	..	..	..	..
Indiana	73	6	20	..	..	1	..	..	..	..	..	12	1	..	..	..	..	..	..	..	..	..	..
Illinois	307	43	2	3	18	5	..	..	..	..	1	24	3	1	..	..	5	..	..	..	..	..	..
Michigan	188	2	15	1	..	4	..	..	..	..	..	16	..	..	..	..	1	..	..	..	..	..	..
Wisconsin	135	1	14	..	..	..	..	..	..	..	..	6	..	..	..	..	..	..	..	..	..	..	..
Minnesota	130	6	14	10	..	1	..	1	..	..	..	7	..	..	1	..	..	..	..	2	..	..	..
Iowa	77	23	116	2	..	18	9	..	4	..	..	10	2	..	..	..	..	..	..	..	..	..	..
Missouri	63	14	2	12	..	3	..	..	..	..	..	13	2	..	..	..	..	..	..	..	2	..	..
North Dakota	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Dakota	15	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nebraska	102	9	1	2	..	..	..	..	2	..	..	5	..	..	..	..	1	..	..	..	..	..	..
Kansas	123	8	15	6	..	6	8	..	..	..	..	7	..	1	..	..	..	..	..	2	..	..	..
Western Division																							
Montana	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wyoming	2	1	..	..	..	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colorado	54	..	1	..	..	1	..	..	..	..	..	13	..	..	..	..	1	..	..	..	..	..	..
New Mexico	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arizona	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Utah	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nevada	9	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Idaho	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Washington	20	..	..	2	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..
Oregon	20	..	..	1	..	4	1	..	..	..	..	1	..	..	..	..	..	..	..	1	1	..	..
California	134	32	1	131	..	5	..	..	..	..	..	20	3	..	3	..	..	..	..	..	..	..	..

TABLE 12.—*Honorary degrees conferred by universities and colleges for men and for both sexes.*

State or Territory.	D. D.	LL. D.	Ph. D.	L. H. D.	Litt. D.	D. C. L.	S. T. D.	E. E.	Mus. D.	Sc. D.	Ped. D.	L. H. M.	A. M.	M. S.	M. L.	Mus. B.	Ped. M.	LL. B.	B. S.
United States	357	259	12	13	28	4	4	1	3	41	4	1	144	8	2	1	1	18	8
North Atlantic Division	104	115	1	10	21	1	2	1	2	36	2	1	63	7	1	...	...	18	8
South Atlantic Division	64	32	1	...	2	1	...	...	...	...	...	...	12	...	...	...	...	...	...
South Central Division	44	23	2	...	...	2	...	...	1	...	...	...	16	1	1	1	...	...	...
North Central Division	141	69	7	3	5	...	2	...	...	4	2	...	32	...	...	...	1	...	...
Western Division	4	6	1	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...
North Atlantic Division:																			
Maine	5	5	....	1	5	...	...	...	*	1	...	...	3	...	...	...	...	...	...
New Hampshire	2	3	....	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...
Vermont	3	2	....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Massachusetts	13	12	....	1	10	...	...	...	...	3	...	...	14	...	...	...	...	18	8
Rhode Island	3	...	....	...	2	...	...	...	...	1	...	...	1	...	...	...	...	...	...
Connecticut	3	7	....	1	...	...	...	...	1	2	...	...	9	...	...	...	...	...	...
New York	20	45	....	6	2	...	2	1	...	20	...	1	13	5	1	...	...	...	...
New Jersey	5	8	....	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...
Pennsylvania	44	27	1	1	2	1	...	...	1	3	2	...	20	2	...	...	...	...	...
South Atlantic Division:																			
Delaware	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Maryland	1	0	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
District of Columbia	4	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Virginia	6	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
West Virginia	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...
North Carolina	20	3	...	...	1	...	...	...	...	...	...	...	5	...	...	...	...	...	...
South Carolina	7	3	...	...	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...
Georgia	20	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Florida	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Central Division:																			
Kentucky	3	9	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...
Tennessee	15	3	...	...	...	2	...	...	1	...	...	...	12	...	...	...	...	...	...
Alabama	4	8	1	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
Mississippi	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Louisiana	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Texas	10	2	1	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...
Arkansas	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Oklahoma	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indian Territory	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Central Division:																			
Ohio	47	23	...	2	...	...	...	...	...	1	...	...	26	...	...	...	...	...	...
Indiana	12	7	...	...	1	...	...	...	...	...	...	...	3	...	...	...	...	...	...
Illinois	19	14	3	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
Michigan	5	4	1	...	...	...	...	...	...	1	...	...	3	...	...	...	...	...	...
Wisconsin	3	6	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Minnesota	4	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Iowa	25	9	...	1	2	—	1	...	...	1	2	—	1	...	...	...	1	...	...
Missouri	3	25	1	...	...	...	...	...	...	...	...	...	10	...	...	...	...	...	...
North Dakota	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Dakota	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nebraska	4	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Kansas	16	2	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Western Division:																			
Montana	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wyoming	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Colorado	2	4	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
New Mexico	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arizona	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Utah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nevada	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Idaho	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Washington	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Oregon	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
California	2	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...

TABLE 13.—*Property of universities and colleges for men and for both sexes.*

State or Territory.	Number of universities and colleges for men	Number of universities and colleges for both sexes	Libraries. Volumes.	Libraries. Pamphlets.	Libraries. Value.	Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.
United States	366	9,794	10,211,784	2,218,326	$13,542,495	$15,694,199	$154,280,327	$208,375,988
North Atlantic Division	282	4,992	4,426,145	1,052,095	4,142,213	5,414,299	77,294,323	99,951,282
South Atlantic Division	49	1,227	1,057,599	295,906	1,498,389	1,315,944	21,397,325	12,575,989
South Central Division	65	1,126	879,156	172,414	981,945	1,392,423	13,027,741	11,120,893
North Central Division	126	2,960	3,226,480	666,948	4,330,940	7,475,497	36,250,312	47,264,726
Western Division	23	302	202,126	109,078	600,259	1,314,073	14,410,926	37,534,167
North Atlantic Division:								
Maine	3	246	176,142	28,200	220,000	99,000	1,915,000	2,033,787
New Hampshire	1	200	105,169	22,209	155,160	50,000	1,300,000	2,000,000
Vermont	..	160	138,956	36,186	147,000	116,120	1,167,000	1,072,569
Massachusetts	71	743	1,049,627	454,671	1,116,509	1,704,689	11,963,082	29,399,193
Rhode Island	16	169	140,000	80,000	80,000	121,000	2,300,000	2,965,956
Connecticut	41	726	505,000	.....	800,000	875,349	7,809,750	9,458,353
New York	95	1,161	1,276,231	309,908	2,455,221	2,099,365	27,703,276	31,020,704
New Jersey	13	586	206,220	82,500	285,000	985,000	4,450,000	3,396,000
Pennsylvania	41	999	920,271	87,340	1,194,322	2,974,805	18,347,205	17,901,880
South Atlantic Division:								
Delaware	..	..	15,050	9,500	22,000	77,700	170,000	83,000
Maryland	22	206	244,000	109,500	352,300	266,000	2,754,000	4,980,075
District of Columbia	6	179	206,812	12,500	292,289	191,103	8,357,455	1,898,788
Virginia	7	319	207,000	35,500	227,000	220,620	2,300,700	2,203,695
West Virginia	..	24	29,500	2,900	65,000	79,660	905,000	275,760
North Carolina	2	221	150,994	41,515	220,000	202,612	1,918,486	1,254,330
South Carolina	..	176	103,414	6,400	109,800	55,000	1,093,300	615,453
Georgia	3	7	100,300	7,550	112,800	65,700	1,920,000	1,068,883
Florida	..	105	20,000	60,340	44,000	109,300	568,475	613,320
South Central Division:								
Kentucky	10	143	90,000	25,765	103,983	261,926	2,062,533	2,296,847
Tennessee	20	515	182,651	40,486	165,160	272,302	3,788,265	3,030,497
Alabama	7	3	56,000	23,000	68,500	47,000	600,000	1,040,000
Mississippi	..	12	26,040	11,000	51,000	111,000	515,000	883,360
Louisiana	1	240	85,076	11,310	74,536	227,623	2,057,000	2,891,313
Texas	27	130	99,269	35,943	108,950	227,550	2,016,000	940,716
Arkansas	..	78	26,700	7,000	42,500	153,700	600,000	288,100
Oklahoma	0	0	7,000	5,000	15,000	60,000	250,000	.....
Indian Territory	.....	.....	5,500	3,500	4,500	1,350	305,000	.....
North Central Division:								
Ohio	21	251	600,340	231,217	918,180	1,063,500	12,517,179	10,261,135
Indiana	1	58	201,150	30,600	289,665	469,316	4,330,403	2,033,797
Illinois	95	950	705,430	118,828	993,643	1,930,952	15,508,776	15,442,177
Michigan	7	70	317,847	54,500	508,579	1,123,019	3,149,925	1,896,523
Wisconsin	20	31	206,870	47,550	310,391	704,017	3,220,507	2,289,405
Minnesota	..	32	164,050	17,200	169,800	343,800	2,993,700	2,118,180
Iowa	16	321	246,949	28,961	264,047	404,266	3,946,334	2,567,003
Missouri	7	274	204,809	57,321	496,656	449,650	6,409,457	7,844,682
North Dakota	..	..	21,000	4,000	31,200	108,000	655,000	678,239
South Dakota	..	13	31,612	4,000	52,000	162,000	700,980	190,233
Nebraska	12	40	117,518	19,042	195,249	321,567	2,071,658	1,253,939
Kansas	11	20	192,200	86,224	252,090	386,271	2,596,400	699,772
Western Division:								
Montana	..	..	10,000	7,000	25,000	50,000	200,000	500,000
Wyoming	0	0	10,000	10,000	27,857	110,642	220,000	25,515
Colorado	23	161	77,000	.....	87,000	153,000	1,710,000	718,000
New Mexico	..	..	5,000	2,000	4,000	5,000	75,000	.....
Arizona	..	..	10,000	13,000	18,915	42,478	172,549	.....
Utah	..	2	28,000	13,500	34,208	105,261	527,675	160,000
Nevada	..	..	7,802	3,200	19,774	82,185	210,050	145,893
Idaho	0	3	5,149	3,800	7,500	47,820	232,750	212,871
Washington	..	40	40,750	21,800	91,150	142,550	1,383,486	268,153
Oregon	..	42	45,593	6,000	58,850	37,000	563,000	498,000
California	11	124	322,372	38,179	826,105	568,137	9,086,106	35,019,736

TABLE 14.—*Income of universities and colleges for men and for both sexes.*

State or Territory.	Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.	Benefactions.
			Current expenses.	Building or other special purposes.				
United States	$10,919,378	$8,618,649	$5,253,291	$2,246,055	$1,023,254	$2,689,896	$30,750,523	$14,965,404
North Atlantic Division	4,909,852	4,009,308	689,454	149,152	198,500	1,058,469	11,074,735	8,501,581
South Atlantic Division	869,538	578,542	524,038	184,587	278,600	187,642	2,622,947	1,688,451
South Central Division	886,240	577,055	300,184	131,168	137,716	301,204	2,333,567	631,003
North Central Division	3,738,078	2,311,687	2,728,041	1,481,838	223,438	986,087	11,469,169	3,605,870
Western Division	515,670	1,082,057	1,011,574	299,310	185,000	156,494	3,260,105	538,499
North Atlantic Division:								
Maine	95,619	92,352	26,000		40,000	11,089	265,060	167,191
New Hampshire	61,800	104,000	20,000				185,800	110,000
Vermont	27,977	56,192	16,000	5,400	40,000	3,627	149,196	101,100
Massachusetts	1,067,894	1,179,260				223,618	2,470,772	2,479,979
Rhode Island	104,130	105,499				3,529	213,158	458,760
Connecticut	496,018	473,375				30,014	999,407	1,525,567
New York	1,738,141	1,344,384	339,481	40,350	38,500	633,233	4,134,089	1,856,729
New Jersey	158,867	157,388	2,473		40,000	617	356,345	229,287
Pennsylvania	1,162,406	556,858	285,500	103,402	40,000	152,742	2,300,908	1,572,958
South Atlantic Division:								
Delaware	1,200	4,980		9,500	40,000	12,167	67,847	
Maryland	179,643	182,276	55,700	22,500		3,800	443,919	74,441
District of Columbia	236,329	47,713			151,100	51,589	486,731	356,306
Virginia	139,769	133,172	65,000	31,000		3,941	372,882	848,675
West Virginia	34,027	13,637	93,900	31,587	35,000	9,006	217,157	115,200
North Carolina	129,242	79,028	45,000	50,000		53,285	356,555	151,469
South Carolina	51,109	33,153	37,300	7,500		17,653	146,715	56,840
Georgia	56,738	49,369	159,900	32,500	25,000	31,201	354,708	64,521
Florida	41,481	35,214	67,238		27,500	5,000	176,433	22,000
South Central Division:								
Kentucky	111,496	104,557	37,627		36,375	30,320	320,375	248,704
Tennessee	234,944	148,435	288		40,000	119,604	543,271	309,979
Alabama	85,420	46,303	5,000			22,904	159,627	13,000
Mississippi	41,478	54,303	13,500	15,000		10,334	134,615	17,960
Louisiana	136,800	86,306	15,000	23,700	28,159	31,379	321,344	12,900
Texas	209,368	119,191	125,000	18,000		66,321	537,880	1,900
Arkansas	56,234	7,960	73,769	49,468	33,182	14,493	235,106	15,060
Oklahoma		10,000	30,000	25,000			65,000	
Indian Territory	10,500					5,849	16,349	11,500
North Central Division:								
Ohio	616,344	451,640	538,829	71,481	25,000	121,834	1,825,128	941,648
Indiana	181,892	99,289	190,000	100,000		59,321	630,452	79,064

TABLE 14.—*Income of universities and colleges for men and for both sexes*—Continued.

State or Territory.	Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.	Benefactions.
			Current expenses.	Building or other special purposes.				
North Central Division—Continued.								
Illinois	$1,316,553	$713,393	$250,000	$276,200	$40,000	$190,973	$2,787,119	$1,113,121
Michigan	290,280	111,521	403,525	.....	.....	116,925	922,251	105,565
Wisconsin	177,690	138,736	378,000	127,500	40,000	136,560	998,486	298,434
Minnesota	194,496	90,868	234,793	224,655	40,000	98,192	883,004	49,630
Iowa	323,195	128,833	185,500	245,500	.....	82,259	965,287	342,030
Missouri	219,268	412,327	116,598	135,752	38,438	57,592	979,975	245,247
North Dakota	12,500	26,325	62,796	78,000	.....	1,500	181,121	35,000
South Dakota	49,695	18,894	60,000	25,000	.....	.....	153,589	72,917
Nebraska	123,050	84,750	135,000	147,250	40,000	69,347	599,397	192,797
Kansas	233,115	35,161	173,000	50,500	.....	51,584	543,360	130,417
Western Division:								
Montana	2,000	15,000	44,610	5,000	.....	250	66,860	250
Wyoming	700	4,408	14,370	.....	40,000	.....	59,478	400
Colorado	104,000	28,000	130,000	.....	.....	.....	262,000	15,000
New Mexico	500	.....	18,000	.....	.....	.....	18,500	.....
Arizona	3,273	.....	25,198	.....	25,000	1,480	54,951	.....
Utah	21,218	6,795	54,000	45,000	.....	48,107	175,120	960
Nevada	1,800	6,032	25,000	24,675	40,000	698	98,205	1,500
Idaho	.....	.....	21,500	30,928	40,000	867	93,295	445
Washington	81,700	19,615	300,000	.....	.....	74,034	475,349	32,985
Oregon	31,441	25,024	47,500	.....	.....	8,095	112,060	17,355
California	269,038	977,183	331,396	193,707	40,000	22,963	1,834,287	469,604

TABLE 15.—*Professors and students in colleges for women, Division A.*

State.	Number of institutions	Professors and instructors.						Students.									
		Preparatory departments.		Collegiate departments.		Total number (excluding duplicates).						College students in—			Number in		
		Men.	Women.	Men.	Women	Men.	Women	Preparatory	Collegiate.	Graduate.	Total.	Liberal arts.	Latin	Greek.	Pedagogy.	Music.	Art.
United States	15	5	50	275	449	277	461	302	6,145	160	6,841	6,145	1,923	500	426	666	385
North Atlantic Division	9	0	0	233	341	233	341	0	5,122	158	5,367	5,122	1,558	426	374	381	312
South Atlantic Division	3	0	0	28	50	28	50	0	725	2	727	725	262	39	52	115	26
South Central Division	1	0	11	8	16	8	25	131	182	.. .	390	182	53	12	. . .	.....	...
North Central Division	1	1	13	1	16	3	19	37	75	. . .	143	75	21	9	. . .	75	5
Western Division	1	5	26	5	26	5	26	134	41	0	214	41	29	2	. ..	95	49
North Atlantic Division:																	
Massachusetts	4	0	0	135	211	135	211	0	3,115	80	3,207	3,115	500	215	221	215	306
New York	4	0	0	68	114	68	114	0	1,629	15	1,719	1,629	921	187	115	160	6
Pennsylvania	1	0	0	30	16	30	16	0	378	63	441	378	137	36	38	.....	... ..
South Atlantic Division:																	
Maryland	1	0	0	10	14	10	14	0	326	.....	326	326	105	18	.....	.....	.....
District of Columbia	1	0	0	7	18	7	18	0	83	.. .	83	83	42	10	40	10	6
Virginia	1	0	0	11	18	11	18	0	317	2	319	317	115	11	12	106	22
South Central Division:																	
Louisiana	1	0	11	8	16	8	25	131	182	. ....	390	182	53	12	.....	.....	.....
North Central Division:																	
Illinois	1	1	13	1	16	3	19	37	75	.....	143	75	21	9	.....	75	5
Western Division:																	
California	1	5	26	5	26	5	26	134	41	0	214	41	29	2	.... ..	95	49

TABLE 16.—*Degrees conferred by colleges for women, Division A.*

State.	A. B.	B. S.	B. L.	B.Mus.	A. M.	Ph. D.	Honorary. Litt.D.
United States	1,124	8	3	2	50	3	1
North Atlantic Division	990	6	.....	2	48	3	1
South Atlantic Division	105	1	.....	.....	2	.....	.....
South Central Division	24	.....	.....	.....	.....	.....	.....
North Central Division	5	1	.....	.....	.....	.....	.....
Western Division	.....	.....	3	.....	.....	.....	.....
North Atlantic Division:							
Massachusetts	596	.....	.....	2	35	1	1
New York	315	6	.....	.....	7	.....	.....
Pennsylvania	79	.....	.....	.....	6	2	.....
South Atlantic Division:							
Maryland	70	.....	.....	.....	.....	.....	.....
District of Columbia	13	1	.....	.....	2	.....	.....
Virginia	22	.....	.....	.....	.....	.....	.....
South Central Division:							
Louisiana	24	.....	.....	.....	.....	.....	.....
North Central Division:							
Illinois	5	1	.....	.....	.....	.....	.....
Western Division:							
California	.....	.....	3	.....	.....	.....	.....

TABLE 17.—*Property of colleges for women, Division A.*

State.	Number of fellowships.	Number of scholarships.	Libraries. Volumes.	Libraries. Pamphlets.	Libraries. Value.	Value of scientific apparatus.	Value of grounds and buildings.	Productive funds.
United States	26	458	284,818	23,100	$522,173	$857,526	$11,595,106	$8,396,722
North Atlantic Division	24	414	240,318	15,600	443,656	701,379	9,634,896	6,848,211
South Atlantic Division	2	21	23,500	7,500	41,517	83,767	1,234,318	459,319
South Central Division	.....	.....	7,500	.....	15,000	47,380	275,892	732,881
North Central Division	.....	5	6,500	.....	15,000	25,000	150,000	106,311
Western Division	0	18	7,000	.....	7,000	.....	300,000	250,000
North Atlantic Division:								
Massachusetts	7	269	116,799	7,000	233,272	423,920	3,999,711	3,308,620
New York	3	72	78,519	600	118,384	217,459	4,144,185	2,339,591
Pennsylvania	14	73	45,000	8,000	92,000	60,000	1,491,000	1,200,000
South Atlantic Division:								
Maryland	2	0	9,000	2,000	10,000	23,000	678,000	350,319
District of Columbia	0	9	10,000	5,000	25,000	20,000	380,000	.....
Virginia	.....	12	4,500	500	6,517	40,767	176,318	109,000
South Central Division:								
Louisiana	.....	.....	7,500	.....	15,000	47,380	275,892	732,881
North Central Division:								
Illinois	0	5	6,500	.....	15,000	25,000	150,000	106,311
Western Division:								
California	0	18	7,000	.....	7,000	.....	300,000	250,000

TABLE 18.—*Income of colleges for women, Division A.*

State.	Income.				Benefactions.
	Tuition and other fees.	From productive funds.	From other sources.	Total.	
United States	$1,464,263	$408,105	$210,953	$2,083,321	$746,015
North Atlantic Division	1,284,911	335,080	161,326	1,781,317	713,230
South Atlantic Division	102,021	34,545	48,410	184,976	31,540
South Central Division	25,387	28,907	.....	54,294	.....
North Central Division	31,944	6,573	1,217	39,734	1,245
Western Division	20,000	3,000	.....	23,000	.....
North Atlantic Division:					
Massachusetts	705,694	165,196	36,186	907,076	433,801
New York	500,217	107,884	30,140	638,241	265,768
Pennsylvania	79,000	62,000	95,000	236,000	13,661
South Atlantic Division:					
Maryland	35,700	29,433	.....	65,133	30,000
District of Columbia	30,391	.....	.....	30,391	.....
Virginia	35,930	5,112	48,410	89,452	1,540
South Central Division:					
Louisiana	25,387	28,907	.....	54,294	.....
North Central Division:					
Illinois	31,944	6,573	1,217	39,734	1,245
Western Division:					
California	20,000	3,000	.....	23,000	.....

TABLE 19.—*Professors and students in colleges for women, Division B.*

State.	Number of institutions.	Professors and instructors.		Students.						College students pursuing courses leading to—					College students in—		Number in—		
		Men.	Women.	Elementary.	Secondary.	Collegiate.	Graduate.	Total number.	Graduated in 1905.	A. B. degree.	Ph. B. degree	M. E. L. or B. L. degree.	B. S. degree.	Other first degrees.	Latin.	Greek.	Pedagogy.	Music.	Art.
United States	107	386	1,530	1,263	5,325	11,213	106	20,392	1,552	3,191	115	903	1,004	223	5,675	363	715	10,029	1,935
North Atlantic Division	11	73	216	100	956	1,142	6	2,505	203	85	10	24	312	24	582	62	32	651	152
South Atlantic Division	39	167	524	364	1,551	5,177	30	7,301	553	1,032	63	326	204	153	2,101	45	250	4,013	724
South Central Division	40	98	509	701	1,710	3,737	50	7,548	585	866	42	491	470	44	2,441	198	364	3,879	702
North Central Division	16	50	254	92	1,077	1,090	20	2,934	205	294	.....	60	16	2	485	44	46	1,392	341
Western Division	1	0	27	6	31	67	...	104	6	14	.. ..	2	2	.. ..	66	14	23	94	16
North Atlantic Division																			
Maine	1	4	6	7	89	24	6	126	23	.. ..	.....	.....	.....	24	20	0	6	12	2
Massachusetts	2	35	58	....	11	578	...	826	56	.....	.....	.....	238	....	24	1	.....	124	7
New York	2	9	62	83	516	120	0	719	44	12	0	0	0	0	148	12	26	83	22
Pennsylvania	6	25	90	10	340	420	..	1,034	80	73	10	24	24	.. ..	390	49	.....	432	121
South Atlantic Division:																			
Maryland	4	24	54	34	250	290	2	636	48	116	28	84	32	11	174	24	2	318	127
Virginia	9	42	106	81	291	917	8	1,301	87	85	.....	.....	46	5	310	.....	35	832	138
North Carolina	9	28	122	82	558	891	4	1,636	117	472	35	20	5	19	519	4	10	815	143
South Carolina	8	30	89	72	146	1,186	7	1,420	122	455	.. .	47	56	30	587	3	108	772	176
Georgia	9	43	153	95	304	1,893	9	2,308	179	804	. ...	129	68	88	511	14	97	1,278	140
South Central Division																			
Kentucky	9	27	96	210	319	820	6	1,355	79	220	15	23	25	8	379	40	60	573	87
Tennessee	7	20	98	132	147	704	5	1,549	152	96	13	148	66	.. ..	317	29	8	764	139
Alabama	7	19	87	110	194	806	9	1,123	96	75	. ...	119	105	36	373	6	27	566	126
Mississippi	9	15	156	139	683	916	28	2,333	190	335	14	70	100	.. ..	1,051	53	257	1,183	219
Louisiana	3	5	22	50	103	176	2	350	31	40	.....	11	70	.....	86	.....	... ..	150	38
Texas	4	9	42	21	234	245	....	708	32	50	....	100	95	.. ..	185	70	....	573	83
Arkansas	1	1	9	30	30	70	0	130	5	50	. ....	20	.. .. ..		50	0	12	70	10
North Central Division.																			
Ohio	3	7	65	.. ....	132	241	.	455	37	190	.....	25	6	.. .	65	25	4	122	31
Illinois	2	3	36	15	201	215	4	435	49	60	.. ..	.. ..	.. ..	.. ..	100	5	20	270	66
Wisconsin	1	2	30	.. .. .	231	88	.. .	383	6	....	.. ....	.....	.... ..	.. .	23	1	22	25	20
Missouri	9	38	106	77	513	546	16	1,481	113	44	..	35	10	2	297	13	. .	975	224
Kansas	1	...	17	.. .. ..	.. ....	.. ....	.. ..	180	..	.....	.. ....	....	.....	.....	.. ..	.....	..	.. ..	.. ..
Western Division																			
California	1	0	27	6	31	67	...	104	6	14	. .	2	2	.	66	14	23	94	16

TABLE 20.—*Degrees conferred by colleges for women, Division B.*

State.	M. E. L. or B. L.	A. B.	B. S.	B. Mus.	B. Paint.	B. O.	A. M.	L. I.	B. Di.	Ph. B.	M. S.	B. Acc'a.	M. L.
United States	306	466	69	143	41	11	21	2	4	7	2	7	1
North Atlantic Division	7	40	2	9	7	....	2	....	....	....	....	....	....
South Atlantic Division	101	233	12	59	13	....	7	2	4	6	....	7	....
South Central Division	169	135	52	57	17	6	7	....	....	1	....	....	1
North Central Division	29	58	3	17	3	5	5	....	....	....	2	....	....
Western Division	....	....	....	1	1	....	....	....	....	....	....	....	....
North Atlantic Division.													
Pennsylvania	7	40	2	9	7	....	2	....	....	....	....	....	....
South Atlantic Division:													
Maryland	7	15	3	7	....	....	2	....	....	6	....	....	....
Virginia	16	15	....	4	6	....	1	....	2	....	....	....	....
North Carolina	7	61	....	10	3	....	1	....	....	....	....	7	....
South Carolina	31	58	....	2	....	....	2	2	....	....	....	....	....
Georgia	40	84	4	36	4	....	1	....	2	....	....	....	....
South Central Division:													
Kentucky	8	40	10	18	2	....	4	....	....	....	....	....	....
Tennessee	52	24	6	9	4	6	3	....	....	....	....	....	....
Alabama	68	19	8	14	3	....	....	....	....	1	....	....	....
Mississippi	21	37	14	11	7	....	....	....	....	....	....	....	1
Louisiana	6	3	7	....	....	....	....	....	....	....	....	....	....
Texas	12	4	7	4	1	....	....	....	....	....	....	....	....
Arkansas	2	3	....	1	....	....	....	....	....	....	....	....	....
North Central Division:													
Ohio	6	26	....	1	....	4	....	....	....	....	....	....	....
Illinois	....	14	....	....	....	....	....	....	....	....	....	....	....
Wisconsin	2	4	....	....	....	....	....	....	....	....	....	....	....
Missouri	21	14	3	16	3	1	5	....	....	....	2	....	....
Western Division.													
California	....	....	....	1	1	....	....	....	....	....	....	....	....

TABLE 21.—*Property of colleges for women, Division B.*

[illegible]	Libraries.		Value of scientific apparatus.	Value of grounds and buildings.	Productive funds.
	Volumes.	Value.			
United States	278,996	$301,401	$263,144	$12,230,979	$3,041,418
North Atlantic Division	41,651	48,116	67,550	2,902,047	2,162,750
South Atlantic Division	84,800	91,350	60,800	4,184,000	206,137
South Central Division	80,793	78,535	19,420	2,568,000	194,500
North Central Division	64,051	71,200	99,794	2,238,932	478,031
Western Division	7,700	[illegible]	15,570	240,000	0
North Atlantic Division:					
Maine	3,000	2,000	1,000	150,000	70,000
Massachusetts	7,140	8,164	20,000	935,000	1,907,000
New York	10,911	13,352	11,850	707,047	83,750
Pennsylvania	20,600	24,600	34,700	1,110,000	12,000
South Atlantic Division:					
Maryland	14,000	17,000	7,800	1,005,000	30,000
Virginia	14,500	15,500	4,300	502,000	10,000
North Carolina	17,800	19,950	14,200	833,000	62,000
South Carolina	12,200	15,100	3,700	629,000	13,000
Georgia	26,500	23,800	31,100	1,215,000	91,137
South Central Division:					
Kentucky	17,100	14,900	5,850	435,000	.....
Tennessee	13,693	11,400	4,150	420,000	.....
Alabama	14,400	14,000	2,800	565,000	12,000
Mississippi	13,900	15,735	3,030	723,000	156,500
Louisiana	10,700	13,500	950	140,000	26,000
Texas	8,000	7,500	1,650	280,000	0
Arkansas	3,000	1,500	.....	55,000	0
North Central Division:					
Ohio	23,407	42,000	85,000	647,500	99,500
Illinois	3,500	4,000	4,500	300,000	3,500
Wisconsin	6,044	6,000	3,144	304,432	175,031
Missouri	29,100	17,200	5,650	635,000	160,000
Kansas	2,000	2,000	1,500	350,000	40,000
Western Division.					
California	7,700	12,200	15,570	240,000	0

TABLE 22.—Income of colleges for women. [Division B.]

State.	Tuition and other fees	From benefactions	From state appropriations	From other sources	Total	Benefactions
United States	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Atlantic [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Atlantic [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Central [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Central [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Western [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Atlantic [illegible]:						
Maine	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Massachusetts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New York	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pennsylvania	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
South Atlantic [illegible]:						
Maryland	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Virginia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Georgia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
South Central [illegible]:						
Kentucky	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tennessee	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Alabama	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Texas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arkansas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Central [illegible]:						
Ohio	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Indiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wisconsin	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Missouri	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kansas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Western [illegible]:						
California	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 23.—*Professors and students in schools of technology.*

State or Territory.	Number of institutions.	Professors and instructors.						Students.									
		Preparatory departments.		Collegiate departments.		Total number.		Preparatory.		Collegiate.		Graduate.				Total number.	
												Resident.		Non-resident.			
		Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
United States.	44	121	38	1,639	127	1,711	154	2,204	664	14,730	1,155	181	44	9	0	21,541	2,678
N. Atlantic Division.	10	7	4	448	15	451	15	58	14	3,565	78	47	1	0	0	3,737	115
S. Atlantic Division	9	4	0	353	0	356	0	203	0	3,738	0	32	9	2	0	4,017	0
S. Central Division	5	17	3	138	4	155	7	818	70	1,334	81	23	0	0	0	2,583	241
N. Central Division	11	47	14	484	66	499	80	1,418	343	4,737	681	56	30	7	0	8,359	1,234
Western Division	9	46	17	216	40	241	52	705	237	1,356	315	23	13	0	0	2,845	826
N. Atlantic Division:																	
New Hampshire	1	0	0	20	0	20	0	0	0	152	7	0	0	0	0	152	7
Massachusetts	3	0	0	251	2	251	2	0	0	1,996	24	47	1	0	0	2,096	39
Rhode Island	1	7	4	18	7	19	7	58	14	45	13	0	0	0	0	116	32
Connecticut	1	0	0	20	4	20	4	0	0	101	22	0	0	0	0	101	22
New York	3	..	..	113	2	115	2	..	..	887	2	0	0	0	0	898	16
New Jersey	1	0	0	26	0	26	0	0	0	394	0	0	0	0	0	394	0
S. Atlantic Division:																	
Maryland	2	3	0	127	0	127	0	60	0	995	0	5	0	0	0	1,060	0
Virginia	2	0	0	79	0	79	0	0	0	964	0	21	0	3	0	1,017	0
North Carolina	2	..	..	46	0	46	0	..	..	691	0	6	0	0	0	697	0
South Carolina	2	2	0	51	0	53	0	145	0	677	0	0	0	0	0	822	0
Georgia	1	..	..	40	0	40	0	..	..	511	0	..	..	..	..	511	0
S. Central Division:																	
Alabama	1	2	0	37	0	39	0	63	0	370	14	13	0	0	0	501	14
Mississippi	2	15	3	32	0	57	3	755	70	457	0	9	0	3	0	1,259	61
Texas	1	0	0	44	0	44	0	0	0	382	0	1	0	0	0	116	0
Oklahoma	1	..	..	25	4	25	4	..	..	125	58	0	0	0	0	105	146
N. Central Division:																	
Ohio	1	0	0	35	0	35	0	0	0	420	0	2	0	0	0	422	0
Indiana	2	0	0	123	5	123	5	0	0	1,571	42	16	6	7	0	1,664	57
Illinois	1	15	4	55	0	60	4	293	0	594	0	1	0	0	0	1,419	0
Michigan	2	..	..	85	15	85	15	151	27	717	175	3	5	0	0	1,028	207
Iowa	1	..	..	79	26	79	26	258	33	758	125	13	0	0	0	1,774	206
North Dakota	1	23	4	23	2	29	4	151	96	48	31	5	0	0	0	573	149
South Dakota	2	8	2	36	5	39	7	189	63	157	54	6	3	0	0	488	135
Kansas	1	1	4	43	15	49	19	376	124	472	254	10	16	0	0	992	470
Western Division:																	
Montana	2	18	6	29	8	30	10	47	20	152	53	4	0	0	0	252	148
Colorado	2	11	3	50	4	57	6	160	37	433	46	2	2	0	0	710	98
New Mexico	2	5	3	30	6	35	9	151	[illegible]	[illegible]	6	7	2	0	0	267	79
Utah	1	..	..	43	15	43	15	31	6	106	37	3	0	0	0	530	186
Washington	1	12	6	36	2	48	7	256	121	216	57	4	2	0	0	610	183
Oregon	1	..	..	28	5	28	5	60	15	370	116	4	7	0	0	476	204

TABLE 24.—*Students pursuing various courses in schools of technology.*

State or Territory.	College students in—														Students in—							
															Pedagogy.		Business course.					
	Liberal arts	Agriculture	Mechanical engineering	Civil engineering	Electrical engineering	Chemical engineering.	Mining engineering.	Textile engineering.	General engineering.	Architecture	Sanitary engineering.	Household economy.	Commerce.	Latin.	Men.	Women.	Men.	Women.	Military drill.	Music.	Art.
United States.	815	1,762	2,833	2,020	2,144	267	970	889	18	98	22	636	100	287	65	23	518	146	9,666	704	336
North Atlantic Division	33	309	606	544	228	74	77	.....	.....	41	22	29	.....	7	1	2	3	2	1,218	.....	30
South Atlantic Division	115	370	561	407	425	44	5	107	.....	.....	.....	.....	.....	46	.....	.....	22	.....	3,286	.....	.....
South Central Division	101	368	246	177	219	30	17	31	.....	.....	.....	37	.....	185	48	.....	181	19	1,559	.....	.....
North Central Division	401	584	1,166	816	1,196	113	353	.....	.....	52	.....	428	.....	30	14	20	82	23	1,929	390	38
Western Division	165	151	252	85	76	.....	458	.....	18	5	.....	141	100	19	2	11	230	96	1,674	314	268
North Atlantic Division:																					
New Hampshire	9	42	8	.....	17	9	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	121	.....	.....
Massachusetts	2	184	207	175	176	54	77	.....	.....	41	22	.....	.....	.....	.....	.....	.....	.....	479	.....	.....
Rhode Island	10	1	1	4	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90	.....	30
Connecticut	12	82	4	4	.....	.....	.....	.....	.....	.....	.....	13	.....	7	1	2	3	2	81	.....	.....
New York	.....	.....	4	361	23	11	.....	.....	.....	.....	.....	16	.....	.....	.....	.....	.....	.....	447	.....	.....
New Jersey	.....	.....	384	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Atlantic Division																					
Maryland	61	20	66	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	973	.....	.....
Virginia	54	58	157	179	206	.....	.....	.....	.....	.....	.....	.....	.....	31	.....	.....	.....	.....	994	.....	.....
North Carolina	.....	103	66	84	50	28	4	14	.....	.....	.....	.....	.....	.....	.....	.....	22	0	502	.....	.....
South Carolina	.....	199	112	50	.....	.....	1	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	817	.....	.....
Georgia	.....	.....	160	70	160	16	.....	70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Central Division																					
Alabama	37	25	68	35	78	36	17	.....	.....	.....	.....	.....	.....	110	.....	.....	.....	.....	477	.....	.....
Mississippi	.....	226	70	13	70	.....	.....	22	.....	.....	.....	.....	.....	10	48	0	167	0	668	.....	.....
Texas	.....	98	76	129	71	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	414	.....	.....
Oklahoma	64	19	32	.....	.....	.....	.....	.....	.....	.....	.....	37	.....	65	.....	.....	14	19	.....	.....	.....
North Central Division																					
Ohio	.....	.....	143	72	103	46	56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indiana	106	76	427	421	515	14	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	537	.....	.....
Illinois	.....	.....	122	122	210	53	.....	.....	.....	37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan	.....	152	285	.....	.....	.....	226	.....	.....	.....	.....	112	.....	.....	.....	.....	.....	.....	600	.....	.....
Iowa	54	168	98	199	176	.....	24	.....	.....	.....	.....	98	.....	.....	.....	.....	.....	.....	.....	15	.....
North Dakota	25	16	23	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	5	2	11	41	6	265	72	31
South Dakota	96	10	18	2	35	.....	47	.....	.....	.....	.....	7	.....	25	12	9	41	23	107	53	7
Kansas	120	162	50	.....	151	.....	.....	.....	.....	11	.....	232	.....	.....	.....	.....	.....	.....	320	250	.....

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Table 25.—*Degrees conferred by schools of technology.*

State or Territory.	On men.													On women.			Honorary.								
	A. B.	B. S.	B. Agri.	B. S. A.	B. C. E.	B. E.	C. E.	M. E.	E. E.	E. M.	M. S.	A. M.	B. M. E.	A. B.	B. S.	M. S.	LL. D.	A. M.	M. S.	M. E.	C. E.	E. M.	M. S. A.	Sc. D.	D. Engr.
United States	3	1,306	11	44	31	27	[illegible]	75	20	96	44	2	21	2	148	4	1	1	6	1	2	1	5	3	4
North Atlantic Division		340					34	50	8		19				6	1			4						3
South Atlantic Division	1	190	11			27	9	11			2	1													
South Central Division		147						1		1	10				7										
North Central Division		563		44	31		8	13	12	37	9		21		110	3				1	2		5	3	1
Western Division	2	66								58	4	1		2	25		1	1	2			1			
North Atlantic Division:																									
New Hampshire		17																	4						
Massachusetts		309					1	2	8		19				3	1									
Rhode Island		2													2										
Connecticut		1																							
New York		11					33								1										
New Jersey								48																	3
South Atlantic Division:																									
Maryland	1	12									1	1													
Virginia		83					9	11			1														
North Carolina		8	11			27																			
South Carolina		58																							
Georgia		29																							
South Central Division																									
Alabama		49						1		1	10				2										
Mississippi		43													1										
Texas		39																							
Oklahoma		16													4										
North Central Division.																									
Ohio		84					5	7	5	1															1
Indiana		233					3	2	3		3				11	1									
Illinois		47						4	4															1	
Michigan		80								36	1				23									2	
Iowa		30		44	31								21		28					1	2		5		
North Dakota		4													1										
South Dakota		23									4				6	1									
Kansas		62									1				41	1									
Western Division.																									
Montana										9	1														
Colorado		3								49	2				1				2			1			
New Mexico		5									1				1										
Utah		13													6										
Washington	2	11										1		2	1		1	1							
Oregon		34													16										

TABLE 26.—*Property of schools of technology.*

State or Territory.	Number of fellowships.	Number of scholarships.	Libraries.			Value of scientific apparatus and machinery.	Value of grounds and buildings.	Productive funds.
			Volumes.	Pamphlets.	Value.			
United States	23	984	857,236	203,846	$1,091,821	$5,017,191	$30,461,900	$14,977,133
North Atlantic Division	1	73	197,587	54,228	437,086	987,963	9,790,043	5,740,406
South Atlantic Division	....	759	97,055	22,406	178,893	857,255	12,790,381	761,851
South Central Division	16	.....	43,277	41,427	94,035	495,081	1,374,306	912,169
North Central Division	2	24	100,583	34,354	258,279	2,142,374	4,900,972	7,055,456
Western Division	3	128	83,634	51,429	123,528	553,518	1,706,198	507,260
North Atlantic Division:								
New Hampshire	....	....	11,708	6,620	14,000	49,800	227,500	160,000
Massachusetts	1	73	103,864	24,558	186,700	601,570	2,368,962	3,764,191
Rhode Island	....	.....	12,560	5,000	16,969	97,865	166,222	50,000
Connecticut	0	0	10,266	1,000	21,000	48,100	138,400	135,006
New York	....	.....	49,199	17,060	180,417	106,628	5,402,959	775,170
New Jersey	....	.....	10,000	.....	18,000	65,000	485,000	366,045
South Atlantic Division:								
Maryland	0	27	50,969	4,000	106,000	250,000	10,700,000	118,000
Virginia	..	404	19,099	9,183	37,649	204,164	679,702	354,412
North Carolina	....	120	5,517	2,000	8,587	93,400	388,050	125,000
South Carolina	..	198	18,380	6,225	23,057	209,691	522,629	154,439
Georgia	....	10	3,000	1,000	3,500	100,000	500,000	0
South Central Division:								
Alabama	11	..	19,077	2,000	37,598	61,339	158,200	253,500
Mississippi	5	.....	14,061	13,427	20,197	244,779	545,531	449,659
Texas	....	.....	5,000	6,000	15,242	109,500	550,000	209,000
Oklahoma	..	.....	10,149	[redacted]	20,998	79,463	120,575	.....
North Central Division:								
Ohio	2	16	5,000	.....	10,000	150,000	556,000	2,000,000
Indiana	....	.....	24,900	6,500	42,000	295,000	905,900	940,000
Illinois	....	5	17,441	2,200	30,300	600,000	650,000	1,500,000
Michigan	0	2	45,672	8,929	45,267	573,821	675,568	966,254
Iowa	..	....	18,324	3,500	56,000	305,967	993,098	683,709
North Dakota	0	1	9,000	875	16,202	35,046	249,757	473,114
South Dakota	..	....	10,588	11,550	8,475	58,000	318,000	.....
Kansas	..	.....	29,458	500	48,535	225,540	443,649	492,381
Western Division								
Montana	..	....	11,295	9,129	18,800	121,000	280,000	23,070
Colorado	..	....	25,639	6,500	45,516	184,094	533,134	97,091
New Mexico	3	92	15,000	10,000	25,750	49,000	133,000	.....
Utah	0	0	13,500	13,000	10,962	76,514	289,064	166,220
Washington	0	36	10,200	[redacted]	22,500	96,500	280,000	27,000
Oregon	....	....	8,000	10,000	.....	27,500	191,000	193,778

TABLE 27.—*Income of schools of technology.*

State or Territory.	Income.							Benefactions.
	Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.	
			Current expenses.	Building or other special purposes.				
United States	$932,647	$680,709	$1,445,743	$849,105	$1,849,962	$477,148	$6,235,314	$606,035
N. Atlantic Division	492,770	205,575	124,150	32,800	762,302	164,008	1,781,665	519,675
S. Atlantic Division	130,988	44,444	296,570	144,750	407,275	71,800	1,155,827	10,000
S. Central Division	7,671	76,082	173,973	78,133	140,325	53,070	529,254	250
N. Central Division	260,125	316,320	547,976	506,923	240,000	133,793	2,005,143	15,800
Western Division	41,093	38,282	303,074	86,499	240,000	54,477	763,425	60,000
N. Atlantic Division.								
New Hampshire	1,785	8,280	10,500		40,000	32,962	93,527	
Massachusetts	353,852	126,005	74,650	3,500	40,000	27,265	625,272	115,808
Rhode Island		2,500	19,000	27,500	40,000	4,000	93,000	
Connecticut	16	7,050	20,000	1,800	32,500	31,192	92,558	
New York	77,179	22,680			600,862	55,004	765,605	348,372
New Jersey	59,938	39,060				12,585	111,703	55,500
S. Atlantic Division								
Maryland	22,636	5,817	9,000	57,000	368,108	12,567	475,128	
Virginia	47,989	21,851	65,000	82,500	31,667	13,825	262,822	
North Carolina	18,946	7,500	27,500	3,750	40,000	7,446	105,142	
South Carolina	21,437	9,266	145,070	1,500	27,500	35,462	240,235	
Georgia	20,000		50,000			2,500	72,800	10,000
S. Central Division.								
Alabama	900	20,280	23,945	1,500	29,075	7,339	83,039	0
Mississippi	3,557	26,980	73,946	24,889	40,000	37,265	206,637	250
Texas	2,055	14,280	60,000	50,000	33,750		160,085	
Oklahoma	1,149	14,542	16,082	1,744	37,500	8,466	79,483	
N. Central Division.								
Ohio	40,400	90,000					130,400	
Indiana	62,207	47,482	149,028	71,543	40,000	20,472	391,422	500
Illinois	70,000	25,000				50,000	145,000	
Michigan	37,249	60,723	154,450	57,100	40,000	41,485	402,007	
Iowa	28,582	35,285	110,000	241,500	40,000	5,865	461,212	
North Dakota	4,207	10,946	31,398	95,400	40,000	4,696	186,647	15,000
South Dakota	7,484	12,362	82,500		40,000	9,275	121,621	
Kansas	9,806	25,648	50,000	41,380	40,000		166,834	
Western Division.								
Montana	3,574	9,420	46,250	6,000	40,000	4,925	110,169	
Colorado	20,122	6,162	142,967	30,000	40,000	17,722	262,973	60,000
New Mexico	1,651		27,542		40,000	2,989	72,182	200
Utah	5,027	7,395	31,315	12,999	40,000	10,313	107,049	
Washington	3,207	5,000	56,000	12,500	40,000	16,403	132,110	400
Oregon	1,512	10,305		25,000	40,000	2,125	78,942	0

TABLE 28.—*Technical courses of study offered by universities, colleges, and schools of technology.*

[NOTE.—× indicates that the course is offered.]

Institution.	Agriculture.	Architecture.	Civil engineering.	Chemical engineering.	Electrical engineering.	Irrigation engineering.	Mechanical engineering	Metallurgical engineering.	Mining engineering.	Marine engineering.	Sanitary engineering.	Naval architecture.	Forestry.	Horticulture.	Textile engineering.	Railway engineering.	Ceramics.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
ALABAMA.																	
Alabama Polytechnic Institute	×		×		×		×		×								
Agricultural and Mechanical College for Negroes	×						[a]×										
University of Alabama			×						×								
ARIZONA.																	
University of Arizona	×		×				×		×								
ARKANSAS.																	
University of Arkansas	×		×	×	×		×		×					×			
CALIFORNIA.																	
University of California	×	×	×	×	×	×	×	×	×		×					×	
St. Mary's College			×						×								
Throop Polytechnic Institute					×												
Leland Stanford Junior University			×	×	×		×		×								
COLORADO.																	
University of Colorado			×	×	×		×										
Colorado College			×		×	×			×								
Colorado Agricultural College	×	×	[b]×		×	[b]×	×							×			
Colorado School of Mines								×	×								
CONNECTICUT																	
Trinity College			×														
Yale University			×		×		×		×		×		×			×	
Connecticut Agricultural College	×																
DELAWARE.																	
State College for Colored Students	×		×														
Delaware College	×		×		×		×										
DISTRICT OF COLUMBIA.																	
Catholic University of America			×	×	×		×										
George Washington University		×	×		×		×										
Gallaudet College			×														
FLORIDA.																	
John B Stetson University			×		×		×										
University of Florida	×		×		×		×							×			
GEORGIA																	
University of Georgia	×		×		×												
Georgia School of Technology			×	×	×		×								×		
North Georgia Agricultural College	×																
Clark University	×																
IDAHO.																	
University of Idaho	×		×		×		×		×								

[a] Mechanical course.

[b] Combined in one course.

TABLE 28.—*Technical courses of study offered by universities, colleges, and schools of technology*—Continued.

[NOTE.—× indicates that the course is offered.]

Institution.	1	Agriculture. 2	Architecture. 3	Civil engineering 4	Chemical engineering. 5	Electrical engineering 6	Irrigation engineering. 7	Mechanical engineering 8	Metallurgical engineering. 9	Mining engineering 10	Marine engineering. 11	Sanitary engineering 12	Naval architecture. 13	Forestry. 14	Horticulture. 15	Textile engineering. 16	Railway engineering. 17	Ceramics. 18
ILLINOIS.																		
University of Illinois		×	×	×	×	×		×				×					×	×
Armour Institute of Technology			×	×		×		×				×					×	
James Millikin University				×		×		×										
INDIANA.																		
Purdue University		×		×		×		×				×						
University of Notre Dame			×	×		×		×										
Earlham College				×														
Rose Polytechnic Institute			×	×		×		×										
IOWA.																		
Iowa State College of Agriculture and Mechanic Arts		×		×		×		×		×					×			×
University of Iowa				×		×		×		×		×		×				
Cornell College				×														
KANSAS.																		
University of Kansas				×	×	×		×		×								
Kansas State Agricultural College		×	×			×		×										
KENTUCKY.																		
Berea College		×																
Agricultural and Mechanical College of Kentucky		×		×		[a]×		[a]×		×								
LOUISIANA.																		
Louisiana State University		×		×	[b]×	×		×										
Tulane University of Louisiana			×	×	×			×										
MAINE.																		
University of Maine		×		×		×		×		×				×	×			
MARYLAND.																		
St John's College								×										
Maryland Agricultural College		×		×				×										
MASSACHUSETTS.																		
Massachusetts Agricultural College		×													×			
Massachusetts Institute of Technology			×	×	×	×		×		×		×	×					
Harvard University		×	×	×		×		×		×				×	×			
Tufts College				×	×	×		×										
Worcester Polytechnic Institute				×	×	×		×										
MICHIGAN.																		
Michigan Agricultural College		×		×				×						×				
University of Michigan				×	×	×		×			×		×	×				
Michigan College of Mines										×								
MINNESOTA.																		
University of Minnesota		×		×		×		×	×	×				×			×	

[a] Combined in one course.

[b] Sugar engineering.

TABLE 28.—*Technical courses of study offered by universities, colleges, and schools of technology*—Continued.

[NOTE.—× indicates that the course is offered.]

Institution.	Agriculture.	Architecture.	Civil engineering.	Chemical engineering.	Electrical engineering.	Irrigation engineering.	Mechanical engineering.	Metallurgical engineering.	Mining engineering.	Marine engineering.	Sanitary engineering.	Naval architecture.	Forestry.	Horticulture.	Textile engineering.	Railway engineering.	Ceramics.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
MISSISSIPPI.																	
Mississippi Agricultural and Mechanical College	×		×		[a]×		[a]×		×					×	×		
University of Mississippi			×		×				×								
Alcorn Agricultural and Mechanical College	×																
MISSOURI.																	
University of Missouri	×		×	×	×		×	×	×		×						
Christian Brothers College		×	×														
Washington University		×	×	×	×		×										
MONTANA.																	
Montana College of Agriculture and Mechanic Arts	×		×		×		×										
Montana School of Mines					×				×								
University of Montana							×										
NEBRASKA.																	
University of Nebraska	×		×	×	×		×		×				×	×			
NEVADA.																	
Nevada State University	×		×				×		×								
NEW HAMPSHIRE.																	
New Hampshire College of Agriculture and Mechanic Arts	×				×		×										
Dartmouth College			×														
NEW JERSEY.																	
Stevens Institute of Technology							×										
Rutgers College	×		×		×												×
Princeton University			×		×												
NEW MEXICO.																	
New Mexico College of Agriculture and Mechanic Arts	×						×										
New Mexico School of Mines			×					×	×								
NEW YORK.																	
Alfred University																	×
Polytechnic Institute of Brooklyn			×		×		×										
Cornell University	×	×	×		×		×			×	×	×				×	
College of the City of New York							×										
Columbia University		×	×	×	×		×	×	×	×	×	×				×	
Manhattan College			×														
New York University			×	×			×										
Clarkson School of Technology			×	×	×		×										
Union University			×		×						×						
Syracuse University		×	×		×		×										
Rensselaer Polytechnic Institute			×														

[a] Combined in one course.

TABLE 28.—*Technical courses of study offered by universities, colleges, and schools of technology*—Continued.

[NOTE.—× indicates that the course is offered.]

Institution.	Agriculture.	Architecture.	Civil engineering.	Chemical engineering.	Electrical engineering.	Irrigation engineering.	Mechanical engineering.	Metallurgical engineering.	Mining engineering.	Marine engineering.	Sanitary engineering	Naval architecture.	Forestry.	Horticulture.	Textile engineering.	Railway engineering.	Ceramics.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
NORTH CAROLINA.																	
University of North Carolina			×		×				×								
North Carolina College of Agriculture and Mechanic Arts	×		×	×	×		×		×						×		
NORTH DAKOTA.																	
North Dakota Agricultural College	×						×										
University of North Dakota					×		×		×								
OHIO.																	
Ohio University			×		×				×								
University of Cincinnati			×	×	×		×										
Case School of Applied Science		×	×		×		×		×								
Ohio State University	×	×	×	×	×		×		×				[a]×	[a]×			×
OKLAHOMA.																	
University of Oklahoma			×		×		×		×								
Oklahoma Agricultural and Mechanical College	×		×				×										
Colored Agricultural and Normal University	×	×			[a]×		[a]×										
OREGON.																	
Oregon Agricultural College	×								×								
University of Oregon			×	×	×				×		×						
PENNSYLVANIA																	
Western University of Pennsylvania			×		×		×		×								
Pennsylvania Military College			×						×								
Lafayette College					×				×								
Grove City College			×				×										
Haverford College							×										
Bucknell University			×		×												
Allegheny College			×														
Temple College			×														
University of Pennsylvania		×	×	×	×		×										
Lehigh University			×	×	×		×		×	×							
Pennsylvania State College	×		×	×	×		×		×								
Swarthmore College							×										
Villanova College			×		×												
Washington and Jefferson College			×														
RHODE ISLAND.																	
Rhode Island College of Agriculture and Mechanic Arts	×		[b]×		×		×										
Brown University			×		×		×										
SOUTH CAROLINA.																	
College of Charleston							×										
Clemson Agricultural College	×		×		[a]×		[a]×		×						×		
South Carolina College			×		×												
Newberry College							×										

[a] Combined in one course.

[b] Highway engineering.

TABLE 28.—*Technical courses of study offered by universities, colleges, and schools of technology*—Continued.

[NOTE.—× indicates that the course is offered.]

Institution.	Agriculture.	Architecture.	Civil engineering	Chemical engineering.	Electrical engineering.	Irrigation engineering.	Mechanical engineering.	Metallurgical engineering.	Mining engineering	Marine engineering	Sanitary engineering.	Naval architecture.	Forestry.	Horticulture.	Textile engineering.	Railway engineering.	Ceramics.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
SOUTH DAKOTA.																	
South Dakota Agricultural College	×		[a]×		×		×							×			
State School of Mines							×		×								
University of South Dakota			×		×		×										
TENNESSEE.																	
Knoxville College	×						×										
University of Tennessee	×		×	×	×		×		×								
Cumberland University			×														
Vanderbilt University			×	×	×		×		×								
University of the South			×														
Washington College	×																
TEXAS.																	
University of Texas			×		×				×		×						
Agricultural and Mechanical College of Texas	×	[b]×	×		×		×								×		
UTAH.																	
Brigham Young College			×														
Agricultural College of Utah	×		×				×										
University of Utah			×	×	×		×		×								
VERMONT																	
University of Vermont	×		×		×		×										
Norwich University			×														
VIRGINIA.																	
Virginia Agricultural and Mechanical College	×		×		×		×		×					×			
University of Virginia	×		×		×		×										
Hampden-Sidney College			×														
Washington and Lee University			×						×								
Virginia Military Institute			×		×												
WASHINGTON.																	
Washington Agricultural College	×		×		×		×		×					×			
University of Washington			×	×	×		×	×	×								
WEST VIRGINIA.																	
West Virginia University	×		×		×		×		×								
WISCONSIN.																	
University of Wisconsin	×		×	×	×		×				×						
WYOMING.																	
University of Wyoming	×					×	×		×								

[a] Civil and agricultural engineering.

[b] Architectural engineering.

TABLE 29.—*Statistics of universities and*

	Location	Name.	Religious or non-sectarian control.	Year of first opening	Professors and instructors. Preparatory department. Men.	Preparatory department. Women.	Collegiate department. Men.	Collegiate department. Women.
	1	2	3	4	5	6	7	8
	ALABAMA							
1	East Lake	Howard College	Bapt	1841	3	0	7	0
2	Greensboro	Southern University	M. E. So	1859	3	0	7	0
3	St Bernard	St Bernard College	R C.	1892	5	0	23	0
4	Springhill	Spring Hill College	R C	1830	5	0	17	0
5	University	University of Alabama	State	1831	0	0	23	3
	ARIZONA							
6	Tucson	University of Arizona	Territory.	1891	4	3	10	1
	ARKANSAS							
7	Arkadelphia	Henderson College	M E So	1890	1	2	3	8
8	do	Ouachita College	Bapt	1886	4	2	6	0
9	Batesville	Arkansas College	Presb	1872	5	1	6	0
10	Carlisville	Arkansas Cumberland College	Cumb Presb	1891	4	0	3	5
11	Conway	Hendrix College	M E So	1884	3	0	6	0
12	Fayetteville	University of Arkansas	State	1872	11	7	27	1
13	Little Rock	Philander Smith College	M E	1877	3	2	5	2
	CALIFORNIA							
14	Berkeley	University of California	State	1900	0	0	164	1
15	Claremont	Pomona College	Cong	1888	3	4	11	2
16	Los Angeles	Occidental College	Presb	1868	7	0	12	4
17	do	St Vincent's College *	R C	1865	9	0	11	0
18	do	University of Southern California	M E	1880	12	9	17	10
19	Oakland	California College	Bapt	1870	2	4	2	3
20	do	St Mary's College	R C	1863	11	0	13	0
21	Pasadena	Throop Polytechnic Institute	Nonsect	1891	12	10	5	1
22	San Francisco	St Ignatius College	R C	1855	8	0	22	0
23	San Jose	University of the Pacific	M E	1851	7	4	7	1
24	Santa Clara	Santa Clara College	R C	1851	3	0	27	0
25	Stanford University	Leland Stanford Junior University	Nonsect	1891	0	0	111	5
	COLORADO							
26	Boulder	University of Colorado	State	1877	7	7	50	9
27	Colorado Springs	Colorado College	Nonsect	1874	10	4	36	8
28	Denver	College of the Sacred Heart	R C	1876	8	0	7	0
29	University Park	University of Denver	M E	1864	4	1	20	5
	CONNECTICUT							
30	Hartford	Trinity College	P E	1824	0	0	20	0
31	Middletown	Wesleyan University	M E	1831	0	0	31	2
32	New Haven	Yale University	Nonsect	1701	0	0	234	0
	DELAWARE							
33	Dover	State College for Colored Students	State	1892	4	1	4	2
34	Newark	Delaware College	State	1834	0	0	20	0
	DIST OF COLUMBIA							
35	Washington	Catholic University of America	R C	1889	0	0	18	0
36	do	Gallaudet College	National	1864	5	3	12	3
37	do	Georgetown University	R C	1789	18	0	20	0
38	do	George Washington University	Nonsect	1821	0	0	67	0
39	do	Gonzaga College	R C	1821	2	0	7	0
40	do	Howard University	National	1867	3	3	7	1
41	do	St. John's College	R C	1870	7	0	6	0

* Statistics of 1903–4.

colleges for men and for both sexes.

Professors and instructors				Students.												
Professional departments.		Total number (excluding duplicates)		Preparatory department.		Collegiate department.		Graduate department				Professional departments		Total number (excluding duplicates)		
								Resident		Nonresident						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9		11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0	0	10	0	40	0	136	0	0	0	0	0	0	0	176	0	1
0	0	10	0	20	8	124	7	0	0	0	0	0	0	144	15	2
5	0	28	0	12	0	45	0	0	0	0	0	22	0	134	0	3
3	0	25	0	75	0	150	0	19	0	0	0	2	0	226	0	4
37	0	40	2	0	0	211	52	5	1	0	0	217	0	421	52	5
0	0	22	4	85	70	21	12	4	2	0	0	0	0	110	84	6
0	0	4	10	32	90	18	50	0	0	0	0	0	0	50	140	7
0	0	8	2	110	133	138	88	0	0	0	0	0	0	248	221	8
0	0	6	1	51	30	26	17	0	0	0	0	0	0	77	47	9
0	0	4	6	46	81	13	10	0	0	0	0	0	0	59	91	10
0	0	8	0	126	10	36	5	0	0	0	0	0	0	162	15	11
40	0	74	8	257	116	331	69	3	1	3	0	234	0	893	186	12
1	0	6	3	27	11	15	8	0	0	0	0	18	0	60	19	13
80	1	704	3	0	0	1,470	1,017	140	102	1	0	330	22	2,014	1,280	14
0	0	17	9	92	49	82	101	0	0	0	0	0	0	178	170	15
0	0	9	11	74	38	49	54	0	0	0	0	0	0	123	116	16
0	0	20	0	170	0	110	0	0	0	0	0	0	0	280	0	17
122	3	157	24	138	92	91	174	5	2	2	0	258	7	508	342	18
0	0	3	6	24	26	3	4	0	0	0	0	0	0	27	30	III
0	0	24	0	175	0	123	0	0	0	0	0	0	0	298	0	20
0	0	17	11	183	84	11	4	0	0	0	0	0	0	226	122	21
0	0	30	0	136	0	162	0	0	0	28	0	0	0	326	0	22
0	0	15	8	69	70	15	8	0	0	0	0	0	0	120	165	23
0	0	30	0	106	0	240	0	1	0	0	0	0	0	353	0	24
...	...	111	5	0	0	961	488	59	40	0	0	..	..	1,040	528	25
52	1	100	17	174	239	303	251	17	13	2	1	108	6	594	606	26
0	0	46	12	100	46	192	185	4	3	3	1	0	0	299	235	27
0	0	15	0	200	0	50	0	0	0	0	0	0	0	250	0	28
125	0	109	6	72	73	183	183	09	22	0	0	219	0	634	599	29
0	0	20	0	0	0	148	0	3	0	1	0	0	0	152	0	30
0	0	31	2	0	0	266	26	11	2	0	0	0	0	277	28	31
97	0	337	0	0	0	2,146	0	257	35	61	0	409	0	2,880	112	32
0	0	7	2	30	30	30	23	0	0	0	0	0	0	62	55	33
0	0	20	0	0	0	120	0	1	0	0	0	0	0	121	0	34
11	0	20	0	0	0	24	0	53	0	0	0	48	0	123	0	35
0	0	13	3	14	11	47	20	2	3	0	0	0	0	63	43	36
128	0	159	0	152	0	84	0	1..	0	1	0	400	0	730	0	37
100	0	166	0	0	0	308	201	64	10	0	0	882	0	1,254	211	38
0	0	4	0	120	0	7	0	0	0	0	0	0	0	127	0	39
57	1	72	11	185	79	63	17	0	0	0	0	382	18	663	204	40
0	0	14	0	133	0	32	0	0	0	0	0	0	0	165	0	42

TABLE 29.—*Statistics of universities and colleges*

	Location.	Name.	Religious or non-sectarian control.	Year of first opening.	Professors and instructors.			
					Preparatory department.		Collegiate department.	
					Men.	Women.	Men.	Women.
	1	2	3	4	5	6	7	8
	FLORIDA.							
42	De Land	John B. Stetson University *	Bapt.	1887	8	4	8	4
43	Lake City	University of Florida	State	1884	7	0	19	0
44	St Leo	St. Leo College	R C	1890	2	0	3	0
45	Tallahassee	Florida State College *	State	1857	5		10	2
46	Winter Park	Rollins College	Nonsect	1885	8	12	8	12
	GEORGIA.							
47	Athens	University of Georgia	State	1800	0	0	24	0
48	Atlanta	Atlanta Baptist College	Bapt	1867	4	3	6	4
49	do	Atlanta University	Nonsect	1869	4	8	5	5
50	do	Morris Brown College	A M E	1885	3	2	3	2
51	Bowdon	Bowdon College *	Nonsect	1857	2	3	2	0
52	Dahlonega	North Georgia Agricultural College	State	1872	4	2	5	1
53	Macon	Mercer University	Bapt	1837	0	0	13	0
54	Oxford	Emory College	M E So	1836	2	0	12	0
55	South Atlanta	Clark University	M E	1870	0	3	4	3
56	Wrightsville	Nannie Lou Warthen Institute	M E	1888		4	2	1
57	Young Harris	Young Harris College	M E So	1885	1	2	4	2
	IDAHO.							
58	Moscow	University of Idaho	State	1892	3	2	14	3
	ILLINOIS.							
59	Abingdon	Hedding College	M E	1853	8	9	8	9
60	Bloomington	Illinois Wesleyan University	M E	1850	0	1	9	1
61	Bourbonnais	St Viateur's College	R C	1868	3	0	10	0
62	Carlinville	Blackburn College	Presb	1859	4	2	5	2
63	Carthage	Carthage College	Luth	1872	6	2	7	1
64	Chicago	St Ignatius College *	R C	1869	20	0	11	0
65	do	St Stanislaus College	R C	1890	5	0	10	0
66	do	University of Chicago	Bapt	1892			209	19
67	Decatur	James Millikin University	Cumb Presb	1903	24	15	24	15
68	Elmhurst	Evangelical Proseminary	Ger Evang	1871	7	0	7	0
69	Eureka	Eureka College	Christian	1855	8	1	6	3
70	Evanston	Northwestern University	M E	1855	14	9	48	4
71	Ewing	Ewing College	Bapt	1867	9	5	5	1
72	Galesburg	Knox College	Nonsect	1837	9	3	11	3
73	do	Lombard College	Univ	1852	1	2	13	7
74	Greenville	Greenville College	Free Meth	1892	7	2	5	2
75	Jacksonville	Illinois College	Presb	1829	8	3	8	3
76	Lake Forest	Lake Forest College	Presb	1858	14	20	18	1
77	Lebanon	McKendree College	M E	1828	0	0	7	0
78	Lincoln	Lincoln College	Cumb Presb	1866	3	2	4	1
79	Monmouth	Monmouth College	Un Presb	1856	3	1	9	3
80	Naperville	Northwestern College	Ev Assn	1861	0	2	10	1
81	Peru	St Bede College	R C	1891	2	0	13	0
82	Quincy	St. Francis Solanus College	R C	1860	3	0	14	0
83	Rock Island	Augustana College	Luth	1860	6		15	
84	Upper Alton	Shurtleff College	Bapt	1827	8	2	9	2
85	Urbana	University of Illinois	State	1868	7	3	133	22
86	Westfield	Westfield College	U B	1861	3	4	4	2
87	Wheaton	Wheaton College	Cong	1860	7	2	7	5
	INDIANA.							
88	Bloomington	Indiana University	State	1824	0	0	66	5
89	Collegeville	St. Joseph's College	R C	1901	11	0	0	0
90	Crawfordsville	Wabash College	Nonsect	1832	0	0	15	0
91	Fort Wayne	Concordia College	Luth	1839	11	0	11	0
92	Franklin	Franklin College	Bapt	1837	0	2	7	2
93	Greencastle	De Pauw University	M E	1837	4	2	21	6
94	Hanover	Hanover College	Presb	1833	1	1	11	2

* Statistics of 1903–4.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments.		Total number (excluding duplicates)		Preparatory department.		Collegiate department		Graduate department.				Professional departments.		Total number (excluding duplicates).		
								Resident.		Nonresident.						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
2	0	18	16	66	57	27	22	0	1	0	0	26	0	183	177	42
0	0	25	0	80	0	87	0	0	0	0	0	0	0	225	0	43
3	0	8	0	10	0	30	0	0	0	0	0	11	0	50	0	44
0	0	17	2	80	73	59	89	0	0	0	0	0	0	145	172	45
0	0	9	14	60	62	9	18	0	0	0	0	0	0	85	115	46
35	0	58	0	0	0	325	0	2	0	0	0	156	0	483	0	47
2	2	12	0	39	0	16	0	0	0	0	0	28	0	83	0	48
0	0	6	11	73	144	31	13	1	1	1	0	0	0	106	188	49
4	0	10	4	29	5	8	1	0	0	0	0	30	2	90	33	50
0	0	2	3	74	85	43	47	0	0	0	0	0	0	117	132	51
0	0	9	3	121	19	67	1	0	0	0	0	0	0	188	20	52
6	0	18	0	0	0	196	0	3	0	0	0	94	0	292	0	53
2	0	16	0	41	0	223	0	2	0	0	0	1	0	267	0	54
0	0	13	6	45	35	17	15	0	0	0	0	0	0	62	125	55
0	0	2	5	80	90	52	80	0	0	0	0	0	0	132	150	56
0	0	5	4	110	105	125	75	0	0	0	0	0	0	235	180	57
0	0	17	5	105	51	121	52	0	1	0	0	0	0	226	107	58
0	0	8	9	75	90	18	32	0	0	0	0	0	0	93	122	59
7	0	21	7	47	16	55	50	0	0	0	0	53	0	155	66	60
6	0	36	0	60	0	196	0	0	0	0	0	42	0	298	0	61
0	0	8	5	10	13	20	[illegible]	0	0	0	0	0	0	36	86	62
0	0	10	4	38	12	22	26	0	0	0	1	0	0	90	89	63
0	0	34	0	351	0	88	0	0	0	20	0	0	0	573	0	64
0	0	10	0	20	0	138	0	0	0	0	0	0	0	158	0	65
58	1	310	41	[illegible]	[illegible]	1,196	1,372	731	300	0	0	716	41	2,394	2,204	66
0	0	24	15	208	129	98	152	4	6	0	0	0	0	312	422	67
0	0	7	0	7	0	100	0	0	0	0	0	0	0	107	0	68
0	0	13	5	60	46	47	23	0	0	0	0	43	1	101	80	69
197	1	277	26	351	188	441	377	30	26	[illegible]	2	1,697	14	2,534	939	70
0	0	9	5	100	70	21	3	2	1	17	0	0	0	140	74	71
0	0	18	15	42	39	99	123	0	1	0	[illegible]	0	0	176	431	72
0	0	13	7	19	7	35	30	0	0	0	0	7	3	81	80	73
1	0	[illegible]	3	30	29	24	18	0	0	0	0	5	1	126	137	74
0	0	8	3	41	17	64	37	0	0	0	0	0	0	105	54	75
0	0	32	21	90	110	89	60	0	2	0	0	0	0	179	172	76
0	0	11	2	62	36	33	10	0	0	0	0	0	0	101	120	77
0	0	5	3	26	33	19	14	1	1	1	0	0	0	88	[illegible]	78
0	0	15	6	47	39	103	96	0	0	0	0	0	0	188	246	79
3	0	18	4	94	28	[illegible]	21	0	0	0	0	34	0	303	137	80
0	0	15	0	62	[illegible]	38	0	0	0	0	0	0	0	147	0	81
0	0	17	0	22	0	163	0	13	0	0	0	0	0	198	0	82
3	0	30	5	125	25	76	28	2	0	11	2	66	0	370	166	83
0	0	12	3	63	62	33	21	0	0	0	0	0	0	96	83	84
151	13	287	37	203	68	1,581	535	50	18	44	5	1,039	47	2,924	673	85
0	0	4	5	29	15	7	5	0	0	0	0	0	0	45	47	86
0	0	11	0	66	62	38	25	0	0	0	0	0	0	155	151	87
14	0	70	5	0	0	773	527	63	23	0	0	151	1	987	551	88
0	0	17	0	107	0	47	0	0	0	0	0	0	0	154	0	89
0	0	15	0	0	0	250	0	0	0	0	0	0	0	[illegible]	0	90
0	0	11	0	90	0	130	0	0	0	0	0	0	0	220	0	91
0	0	7	4	39	27	53	42	0	0	0	0	0	0	102	122	92
0	0	27	14	94	61	222	234	5	4	0	0	0	0	348	304	93
0	0	11	2	22	16	50	30	0	0	0	0	0	0	72	46	94

TABLE 29.—*Statistics of universities and colleges*

	Location.	Name.	Religious or non-sectarian control.	Year of first opening.	Professors and instructors.			
					Preparatory department.		Collegiate department	
					Men.	Women.	Men.	Women.
	1	2	3	4	5	6	7	8
	INDIANA—continued							
95	Indianapolis	Butler College	Christian	1855	0	2	17	0
96	Merom	Union Christian College	Christian	1859	2	1	3	2
97	Moores Hill	Moores Hill College	M. E.	1856	5	2	7	2
98	Notre Dame	University of Notre Dame	R. C.	1842	21	0	23	0
99	Richmond	Earlham College	Friends	1847	0	0	20	8
100	St. Meinrad	St. Meinrad College	R. C.	1857	.	.	11	0
101	Upland	Taylor University	M. E.	1846	8	2	9	2
	INDIAN TERRITORY							
102	Bacone	Indian University	Bapt.	1880	2	5	3	5
103	Muskogee	Henry Kendall College	Presb.	1894	4	0	4	0
	IOWA							
104	Cedar Rapids	Coe College	Presb.	1881	2	3	16	7
105	Charles City	Charles City College*	M. E.	1901	3	5	6	.
106	Clinton	Wartburg College	Luth.	1868	10	0	10	0
107	College Springs	Amity College	Nonsect	1872	2	3	3	3
108	Decorah	Luther College	Luth.	1861	13	0	13	0
109	Des Moines	Des Moines College	Bapt.	1905	3	5	4	5
110	do	Drake University	Christian	1881	17	8	23	2
111	Dubuque	St. Joseph's College	R. C.	1873	4	0	9	0
112	Fairfield	Parsons College	Presb.	1875	5	1	10	2
113	Fayette	Upper Iowa University	M. E.	1857	7	2	6	3
114	Grinnell	Iowa College	.	1848	3	4	21	2
115	Hopkinton	Lenox College	Presb.	1859	5	5	5	5
116	Indianola	Simpson College	M. E.	1867	14	15	10	7
117	Iowa City	University of Iowa	State	1855	0	0	57	6
118	Lamoni	Graceland College	L. D. S.	1895	5	3	5	3
119	Legrand	Palmer College	Christian	1899	3	1	3	0
120	Mount Pleasant	German College	M. E.	1873	4	2	14	3
121	do	Iowa Wesleyan University	M. E.	1844	4	4	18	10
122	Mount Vernon	Cornell College	M. E.	1857	2	13	10	4
123	Oskaloosa	Penn College	Friends	1873	7	4	9	3
124	Pella	Central University of Iowa	Bapt.	1853	4	5	6	2
125	Sioux City	Morningside College	M. E.	1894	6	4	16	4
126	Storm Lake	Buena Vista College	Presb.	1891	3	5	6	2
127	Tabor	Tabor College	Cong.	1857	1	0	7	6
128	Toledo	Western College	U. B.	1857	4	2	4	1
	KANSAS							
129	Atchison	Midland College	Luth.	1887	2	4	8	4
130	do	St. Benedict's College	R. C.	1858	4	0	20	0
131	Baldwin	Baker University	M. E.	1858	0	4	12	8
132	Emporia	College of Emporia	Presb.	1883	4	0	6	4
133	Highland	Highland University	Presb.	1857	3	4	3	4
134	Holton	Campbell College	U. B.	1903	3	3	8	4
135	Kansas City	Kansas City University	Meth. Prot.	1901	3	1	6	2
136	Lawrence	University of Kansas	State	1866	0	0	64	6
137	Lincoln	Kansas Christian College	Christian	1892	3	2	3	2
138	Lindsborg	Bethany College	Luth.	1881	11	3	11	3
139	Ottawa	Ottawa University	Bapt.	1865	.	.	12	5
140	St. Marys	St. Mary's College	R. C.	1869	23	0	20	0
141	Salina	Kansas Wesleyan University	M. E.	1886	2	4	6	2
142	Sterling	Cooper College	Un. Presb.	1887	1	2	4	2
143	Topeka	Washburn College	Cong.	1865	9	4	18	6
144	Wichita	Fairmount College	Cong.	1892	4	2	12	4
145	do	Friends University	Friends	1898	7	7	7	7
146	Winfield	St. John's Lutheran College	Luth.	1893	5	0	5	0
147	do	Southwest Kansas College	M. E.	1886	17	8	8	2

*Statistics of 1903–4.

a Name changed to Leander Clark College in 1906.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments.		Total number (excluding duplicates)		Preparatory department.		Collegiate department.		Graduate department				Professional departments		Total number (excluding duplicates)		
								Resident		Nonresident						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0	0	17	2	31	17	75	106	1	1	0	0	0	0	107	124	95
0	0	6	3	25	43	13	10	1	1	0	1	0	0	39	55	96
0	0	12	4	45	16	30	14	2	3	1	0	0	0	78	33	97
8	0	52	0	414	0	276	0	0	0	0	0	48	0	738	0	98
0	0	20	8	0	0	169	239	0	0	0	0	0	0	169	230	99
8	0	15	0			64	0	0	0	0	0	55	0	179	0	100
2	2	9	3	107	27	27	10	1	0	0	0	33	7	168	44	101
0	0	3	5	81	67	5	6	0	0	0	0	0	0	86	73	102
0	0	4	9	90	56	9	5	0	0	0	0	0	0	105	61	103
0	0	18	10	64	45	82	90	0	0	0	0	0	[illegible]	146	135	104
0	0	7	6	51	43	12	4	0	0	0	0	0	0	111	96	105
0	0	10	0	61	0	48	0	0	0	0	0	0	0	109	0	106
0	0	8	4	24	32	10	13	0	0	0	0	0	0	76	94	107
0	0	13	0	81	0	117	0	0	0	0	0	0	0	148	0	108
0	0	4	6	27	14	29	25	0	0	0	0	0	0	56	39	109
72	3	93	22	202	233	206	151	9	2	3	0	326	51	611	609	110
0	0	9	0	130	0	40	0	0	0	0	0	0	0	182	0	111
0	0	13	4	27	24	36	36	2	1	0	0	0	0	84	144	112
0	0	21	14	52	35	80	34	4	1	12	2	0	0	203	292	113
0	0	26	9	76	45	127	183	1	3	0	0	0	0	214	285	114
0	0	5	5	45	72	15	16	0	0	0	0	0	0	60	88	115
0	0	21	18	273	196	106	100	0	0	0	0	0	0	350	367	116
81	0	108	7	0	0	404	287	94	68	0	0	619	45	1,091	469	117
0	0	5	3	16	9	2	8	0	0	0	0	0	0	18	17	118
0	0	5	1	17	15	8	5	0	0	0	0	0	0	25	20	119
4	0	18	6	57	29	27	22	1	0	0	0	21	5	86	69	120
0	0	20	12	128	191	57	50	2	3	0	0	0	0	187	224	121
0	0	21	17	155	179	193	186	3	3	0	0	0	0	351	368	122
1	0	11	6	60	68	64	83	0	1	2	2	8	7	135	219	123
3	0	7	8	37	28	17	12	0	0	0	[illegible]	20	0	120	70	124
0	0	18	10	132	68	75	62	3	1	0	0	0	0	223	357	125
0	0	9	7	50	50	12	10	0	1	0	0	0	0	62	61	126
0	0	8	6	29	30	20	[illegible]	0	1	0	0	0	0	60	107	127
0	0	0	4	35	28	23	23	0	0	0	0	0	0	[illegible]	93	128
0	0	8	0	40	20	28	42	0	0	0	0	22	0	98	76	129
4	0	21	0	32	0	54	0	0	0	0	0	7	0	140	0	130
0	0	18	12	247	160	233	156	0	0	0	0	0	0	564	417	131
0	0	6	11	14	15	35	57	2	1	0	0	0	0	76	109	132
0	0	3	4	29	47	5	7	0	0	0	0	0	0	37	76	133
0	0	8	5	75	79	16	4	0	0	0	0	0	0	91	83	134
40	4	46	7	45	37	17	7	1	0	1	0	93	17	181	206	135
10	0	85	14	0	0	661	354	39	37	2	0	201	6	912	534	136
0	0	3	2	53	50	20	18	0	0	0	0	0	0	73	68	137
2	0	34	6	73	91	40	40	4	0	0	0	0	0	413	546	138
0	0	12	5	50	46	110	93	0	0	0	0	0	0	160	139	139
0	0	28	0	140	0	100	0	0	0	0	0	0	0	342	0	140
0	0	8	6	73	68	27	24	0	0	1	0	0	0	101	92	141
0	0	6	8	24	35	28	21	0	0	0	0	0	0	106	152	142
66	3	82	9	88	64	108	133	3	2	0	1	123	7	322	207	143
0	0	15	5	54	39	33	43	0	0	0	0	0	0	107	146	144
0	0	7	7	89	79	40	36	0	0	0	0	0	0	128	115	145
0	0	7	0	50	10	18	12	0	0	0	0	0	0	68	22	146
0	0	17	8	186	238	31	19	0	0	0	0	0	0	217	257	147

TABLE 29.—*Statistics of universities and colleges*

	Location.	Name.	Religious or non-sectarian control.	Year of first opening	Professors and instructors.			
					Preparatory department.		Collegiate department.	
					Men.	Women.	Men.	Women.
	1	2	3	4	5	6	7	8
	KENTUCKY.							
148	Barboursville	Union College	M. E	1886		2	5	4
149	Berea	Berea College	Nonsect	1855	15	18	6	3
150	Danville	Central University of Kentucky	Presb.	1822	6	6	19	0
151	Georgetown	Georgetown College	Bapt	1829	2	1	9	8
152	Glasgow	Liberty College	Bapt	1875	1	5	2	10
153	Lexington	Agricultural and Mechanical College of Kentucky	State	1866	5	0	23	2
154	do	Kentucky University	Christian	1836	5	3	16	13
155	Russellville	Bethel College	Bapt	1854	3	0	5	0
156	St. Marys	St. Mary's College	R. C	1821	2	0	11	0
157	Winchester	Kentucky Wesleyan College	M. E. So.	1866	1	1	6	2
	LOUISIANA.							
158	Baton Rouge	Louisiana State University	State	1860	5	0	27	0
159	Convent	Jefferson College	R. C	1864	5	0	16	0
160	Jackson	Centenary College of Louisiana*	M. E. So.	1825	3	0	6	0
161	New Orleans	College of the Immaculate Conception	R. C	1847	3	0	6	0
162	do	Leland University	Bapt	1870	6	5	3	4
163	do	New Orleans University*	M. E	1873	3	8	5	4
164	do	Tulane University of Louisiana	Nonsect	1834			20	
	MAINE.							
165	Brunswick	Bowdoin College	Cong	1802	0	0	21	0
166	Lewiston	Bates College	Free Bapt	1863	0	0	10	2
167	Orono	University of Maine	State	1868	5	0	48	2
168	Waterville	Colby College	Bapt	1818	0	0	16	2
	MARYLAND.							
169	Annapolis	St John's College	Nonsect	1789	2	0	11	0
170	Baltimore	Johns Hopkins University	Nonsect	1876	0	0	58	1
171	do	Loyola College	R. C	1852	11	0	18	0
172	do	Morgan College	M. E	1867	5	2	5	2
173	Chestertown	Washington College	Nonsect	1783	5	1	6	1
174	Ellicott City	Rock Hill College	R. C	1857	7	0	8	0
175	do	St. Charles College	R. C	1848	17	0	17	0
176	Emmitsburg	Mount St. Mary's College	R. C	1808	9	0	9	0
177	New Windsor	New Windsor College	Presb.	1843	0	1	3	3
178	Westminster	Western Maryland College	Meth. Prot	1867	3	3	10	8
	MASSACHUSETTS							
179	Amherst	Amherst College	Nonsect	1821	0	0	36	0
180	Boston	Boston College	R. C	1804	17	0	17	0
181	do	Boston University	M. E	1873	9	0	23	2
182	Cambridge	Harvard University	Nonsect	1638	0	0	307	0
183	Springfield	American International College	Cong	1885	6	4	6	2
184	Tufts College	Tufts College	Univ	1854	6	0	44	1
185	Williamstown	Williams College	Nonsect	1793	0	0	44	0
186	Worcester	Clark University	Nonsect	1889	0	0	16	0
187	do	Collegiate Department, Clark University	Nonsect	1902	0	0	29	0
188	do	College of the Holy Cross	R. C	1843	17	0	15	0
	MICHIGAN							
189	Adrian	Adrian College	Meth. Prot	1859	0	0	9	6
190	Albion	Albion College	M. E	1843	5	3	12	5
191	Alma	Alma College	Presb	1887	2	0	7	3
192	Ann Arbor	University of Michigan	State	1841	0	0	191	6
193	Detroit	Detroit College	R. C	1877	7	0	6	0
194	Hillsdale	Hillsdale College	Free Bapt	1855	4	1	7	3
195	Holland	Hope College	Reformed	1866	21	3	20	5
196	Kalamazoo	Kalamazoo College	Bapt	1855	6	3	8	1
197	Olivet	Olivet College	Cong	1859	3	5	11	3

*Statistics of 1903–4.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments.		Total number (excluding duplicates)		Preparatory department.		Collegiate department.		Graduate department.				Professional departments.		Total number (excluding duplicates).		
								Resident.		Nonresident.						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0	0	5	6	31	14	5	9	0	0	0	0	0	0	36	23	148
0	0	23	21	221	209	22	12	0	0	0	0	0	0	243	319	149
78	0	100	6	170	190	165	0	5	0	5	0	532	0	978	190	150
0	0	11	9	54	31	98	91	0	0	0	0	0	0	152	122	151
0	0	2	10	25	30	10	105	0	0	0	0	0	0	35	135	152
0	0	40	3	93	6	324	45	15	5	0	0	0	0	494	84	153
29	0	43	15	53	7	151	131	4	0	0	0	442	8	646	144	154
0	0	8	0	25	0	103	0	1	0	0	0	0	0	129	[illegible]	155
0	0	13	0	85	0	60	0	0	0	0	0	0	0	145	0	156
0	0	7	3	24	6	82	48	0	0	0	0	0	[illegible]	106	54	157
0	0	28	0	132	0	322	0	3	[illegible]	[illegible]	0	0	0	457	1	158
0	0	21	0	73	0	92	0	0	0	0	0	0	0	165	0	159
0	0	6	0	113	7	26	4	0	0	0	0	0	0	139	11	160
0	0	24	0	155	0	49	0	22	0	0	0	0	0	437	0	161
0	0	12	10	59	86	14	11	0	1	12	0	2	0	86	98	162
11	0	16	14	23	17	5	2	0	0	0	0	57	20	85	39	163
54	0	75	0	.....	.....	289	.....	28	31	0	0	636	1	929	73	164
26	0	43	0	0	0	280	0	0	0	0	0	90	0	363	0	165
7	0	21	2	0	0	196	157	0	0	0	0	[illegible]	1	208	186	166
13	0	60	2	9	0	307	20	7	0	5	1	93	1	511	22	167
0	0	16	2	[illegible]	0	135	107	0	[illegible]	0	0	0	0	135	108	168
0	0	13	0	58	0	147	0	0	0	0	0	0	0	205	0	169
77	2	165	3	[illegible]	0	183	0	194	0	0	0	344	25	790	25	170
0	0	24	0	105	0	40	0	0	0	0	0	0	0	145	0	171
2	0	7	2	31	11	9	1	0	0	0	0	0	0	48	38	172
0	0	10	1	27	14	41	3	3	0	0	0	0	0	71	59	173
0	0	12	0	100	0	50	0	0	0	0	0	0	0	150	0	174
0	0	17	0	130	0	50	0	0	0	0	0	0	0	180	0	175
4	0	16	0	73	0	127	0	0	0	0	0	38	0	238	0	176
0	0	5	4	21	25	9	7	0	0	2	0	0	0	33	32	177
0	0	13	9	40	24	71	85	0	0	0	0	0	0	120	113	178
0	0	30	0	0	0	406	0	5	0	1	0	0	0	412	0	179
0	0	26	0	240	0	125	0	0	0	0	0	0	0	365	0	180
89	3	143	5	0	0	182	319	11	5	52	23	577	44	960	364	181
221	0	525	0	0	0	2,572	0	349	0	17	0	1,214	0	4,136	0	182
0	0	6	6	31	17	7	3	0	0	0	0	0	0	68	20	183
142	3	129	3	19	0	247	83	6	0	0	0	563	65	835	148	184
0	0	44	0	0	0	434	0	9	0	34	0	0	0	477	0	185
0	0	16	0	9	0	0	0	77	9	0	0	0	0	77	9	186
0	0	20	0	0	0	88	0	0	0	0	0	0	0	88	0	187
0	0	28	0	203	0	219	0	0	0	0	0	0	0	[illegible]	0	188
0	0	9	6	32	18	32	10	0	0	0	0	25	0	70	60	189
0	0	16	10	45	29	114	86	2	0	24	[illegible]	0	0	237	237	190
0	0	11	11	38	23	39	26	0	0	0	0	0	0	112	155	191
143	4	296	9	0	0	1,685	621	71	25	6	0	1,465	48	3,142	690	192
0	0	13	0	149	0	86	0	0	0	0	0	0	0	235	0	193
3	0	16	[illegible]	31	27	63	57	0	0	0	0	0	0	149	107	194
0	0	21	3	101	42	85	61	0	0	0	0	0	0	186	103	195
0	0	9	4	27	11	95	86	0	0	0	0	0	0	122	97	196
0	0	14	8	51	64	70	90	0	0	0	0	0	0	121	154	197

TABLE 29.—*Statistics of universities and colleges*

	Location.	Name.	Religious or non-sectarian control.	Year of first opening	Professors and instructors.			
					Preparatory department.		Collegiate department.	
					Men.	Women.	Men.	Women.
	1	2	3	4	5	6	7	8
	MINNESOTA.							
198	Collegeville	St. John's University	R. C	1857	5	0	15	0
199	Minneapolis	Augsburg Seminary	Luth	1869	8	0	7	0
200	do	University of Minnesota	State	1868	30	7	125	15
201	Northfield	Carleton College	Nonsect	1867	3	3	13	5
202	do	St Olaf College	Luth	1874	17	5	17	5
203	St Paul	Hamline University	M E	1854	5	2	17	3
204	do	Macalester College	Presb	1885	8	4	11	3
205	St Peter	Gustavus Adolphus College	Luth	1862	22	4	11	1
206	Winnebago City	Parker College	Free Bapt	1898	4	0	3	3
	MISSISSIPPI							
207	Clinton	Mississippi College	Bapt	1827	2	0	7	0
208	Holly Springs	Rust University	M E	1867	7	7	5	2
209	Jackson	Millsaps College*	M E So	1892	3	0	7	0
210	University	University of Mississippi	State	1848	0	0	24	2
	MISSOURI							
211	Bolivar	Southwest Baptist College*	Bapt	1878	4	3	2	3
212	Bowling Green	Pike College*	Nonsect	1881		1	3	2
213	Cameron	Missouri Wesleyan College	M E	1887	2	2	6	2
214	Canton	Christian University	Christian	1853			11	3
215	Clarksburg	Clarksburg College	Bapt	1878	3	2	2	1
216	Columbia	University of Missouri	State	1841	0	0	121	9
217	Fayette	Central College	M E So	1857	3	0	9	0
218	Fulton	Westminster College	Presb	1853	10	1	10	0
219	Glasgow	Pritchett College*	Nonsect	1866	4	4	5	1
220	La Grange	La Grange College	Bapt	1858			7	7
221	Liberty	William Jewell College	Bapt	1849	15	0	12	0
222	Marshall	Missouri Valley College	Cumb Presb	1889	13	2	13	2
223	Parkville	Park College	Presb	1875	3	5	15	0
224	St. Louis	Christian Brothers College	R. C	1851	16	0	12	0
225	do	St Louis University	R. C	1829	30	0	13	0
226	do	Washington University	Nonsect	1859	38	33	39	0
227	Springfield	Drury College	Cong	1873	3	4	8	2
228	Tarkio	Tarkio College	U Presb	1883	1	5	6	3
229	Warrenton	Central Wesleyan College	M E	1864	4	1	5	2
	MONTANA.							
230	Missoula	University of Montana	State	1895	5	4	7	3
	NEBRASKA.							
231	Bellevue	Bellevue College	Presb	1883			12	8
232	Bethany	Cotner University	Christian	1889	10	10	10	10
233	College View	Union College*	7th D. Adv	1891	2	5	14	1
234	Crete	Doane College	Cong	1872	11	3	11	3
235	Grand Island	Grand Island College	Bapt	1892	6	2	7	2
236	Hastings	Hastings College	Presb	1882	5	4	5	4
237	Lincoln	University of Nebraska	State	1869			79	18
238	Omaha	Creighton University	R. C	1879	8	0	13	0
239	University Place	Nebraska Wesleyan University	M E	1888	7	6	13	2
240	York	York College	U. B	1890	4	2	3	2
	NEVADA.							
241	Reno	Nevada State University	State	1886	4	5	16	5
	NEW HAMPSHIRE.							
242	Hanover	Dartmouth College	Nonsect	1769	0	0	57	0
243	Manchester	St. Anselm's College	R. C	1893	10	0	9	0

* Statistics of 1903-4.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments.		Total number (excluding duplicates).		Preparatory department.		Collegiate department.		Graduate department.				Professional departments.		Total number (excluding duplicates).		
								Resident.		Nonresident.						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
4	0	29	0	46	0	163	0	0	0	0	0	25	0	300	0	198
2	0	8	0	65	[illegible]	38	0	0	0	0	0	17	[illegible]	120	0	199
159	1	333	49	604	159	1,031	788	55	42	10	6	907	23	2,626	1,007	200
0	0	15	8	18	36	95	103	1	0	1	2	0	0	118	211	201
0	0	17	5	180	43	113	18	2	0	1	0	0	0	300	105	202
43	0	65	5	81	20	139	91	0	0	7	3	102	4	351	128	203
0	0	14	6	72	40	44	26	0	0	0	0	0	0	116	66	204
0	0	24	7	99	23	40	19	0	0	0	0	0	0	233	110	205
0	0	4	6	31	28	4	8	0	0	0	0	0	0	35	36	206
0	0	9	0	128	2	248	1	1	[illegible]	4	0	0	0	381	3	207
0	6	13	13	120	279	6	2	0	0	0	0	0	0	126	281	208
3	0	12	0	109	0	113	0	0	0	0	0	19	0	240	6	209
12	0	36	2	0	0	197	66	6	0	22	2	67	1	290	69	210
0	0	4	3	30	30	14	12	0	0	0	0	0	0	50	42	211
0	0	3	3	28	30	23	5	0	0	0	0	0	0	54	37	212
0	0	8	6	55	65	14	16	0	0	0	0	0	0	114	122	213
.	.	11	3	.	.	109	58	5	3	.	.	54	3	131	61	214
0	0	5	3	20	35	10	25	0	0	0	0	0	0	30	60	215
15	0	139	9	0	0	1,059	415	42	18	0	0	331	7	1,452	446	216
0	0	12	0	75	1	51	4	1	5	0	0	0	0	127	10	217
0	0	11	1	94	0	67	0	0	1	0	0	0	0	151	1	218
0	0	6	4	25	34	8	11	0	0	0	0	0		33	45	219
0	0	7	7			65	60	0	0	0	0	0	0	65	60	220
0	0	27	0	170	0	149	0	2	0	10	0	0	0	329	0	221
0	0	13	2	73	52	63	47	0	0	0	0	0	0	138	99	222
0	0	18	6	143	114	86	89	0	0	0	0	0	0	229	203	223
0	0	28	0	410	0	130	0	0	0	0	0	0	0	540	0	224
112	0	156	0	396	0	48	0	64	0	0	0	481	0	989	0	225
114	0	191	33	570	468	191	74	10	6	0	0	497	0	1 268	548	226
0	0	12	0	117	111	50	70	0	0	0	0	0	0	167	228	227
0	0	12	12	32	59	42	49	0	0	0	0	0	0	142	170	228
4	0	17	4	100	50	56	20	0	0	0	0	44	0	200	115	229
0	0	10	5	43	45	69	48	5	1	2	0	0	0	124	144	230
0	0	12	8	29	45	46	42	0	3	0	0	0	0	75	[illegible]	231
32	0	42	10	73	82	24	12	0	0	0	0	75	19	172	101	232
0	0	16	6	111	50	102	98	0	0	0	0	0	0	213	157	233
0	0	16	8	53	41	73	63	1	0	0	0	0	0	118	115	234
0	0	8	3	37	28	30	24	0	0	0	1	0	0	83	84	235
0	0	7	7	50	21	25	15	0	0	0	0	0	0	119	121	236
64	2	181	18	356	23	773	672	62	63	0	0	291	11	1 509	1,159	237
105	1	126	1	256	0	80	0	23	0	0	0	253	1	618	1	238
0	0	15	5	125	87	67	103	0	0	0	0	0	0	192	185	239
0	0	7	9	58	18	20	8	0	0	0	0	0	0	129	159	240
0	0	22	11	34	42	103	75	1	2	0	0	0	0	138	119	241
20	0	80	0	0	0	868	0	21	0	15	0	60	0	926	0	242
0	0	10	0	85	0	11	0	0	0	0	0	0	0	96	0	243

TABLE 29.—*Statistics of universities and colleges*

	Location	Name.	Religious or non-sectarian control	Year of first opening	Professors and instructors.			
					Preparatory department		Collegiate department.	
					Men.	Women.	Men.	Women.
	1	2	3	4	5	6	7	8
	NEW JERSEY.							
244	Jersey City	St. Peter's College	R. C	1878	4	0	6	0
245	Newark	St. Benedict's College	R. C	1868	2	0	8	0
246	New Brunswick	Rutgers College	Reformed	1766	6	5	30	0
247	Princeton	Princeton University	Nonsect	1746	0	0	109	0
248	South Orange	Seton Hall College	R. C	1856	3	0	15	0
	NEW MEXICO.							
249	Albuquerque	University of New Mexico	Territory	1892	5	2	7	2
	NEW YORK							
250	Alfred	Alfred University	Nonsect	1836	4	4	16	3
251	Allegany	St Bonaventure's College	R. C	1859	4	0	13	0
252	Annandale	St. Stephen's College	P E	1860	0	0	9	0
253	Brooklyn	Adelphi College	Nonsect	1896	15	46	19	6
254	do	Polytechnic Institute of Brooklyn	Nonsect	1854	25	5	20	0
255	do	St Francis College	R C	1890	21	0	17	0
256	do	St. John's College	R C	1870	10	0	9	0
257	Buffalo	Canisius College	R. C	1870	21	0	9	0
258	Canton	St. Lawrence University	Univ	1858	0	0	11	2
259	Clinton	Hamilton College	Nonsect	1812	0	0	18	0
260	Geneva	Hobart College		1822	0	0	16	0
261	Hamilton	Colgate University	Bapt	1819	8	0	22	0
262	Ithaca	Cornell University	Nonsect	1868	0	0	241	5
263	New York	College of St. Francis Xavier	R. C	1847	19	0	19	0
264	do	College of the City of New York	City	1849	85	0	55	0
265	do	Columbia University	Nonsect	1754	0	0	234	0
266	do	Manhattan College	R C	1863	10	0	17	0
267	do	New York University	Nonsect	1832	0	0	65	0
268	do	St John's College	R C	1841	21	0	15	0
269	Niagara University	Niagara University	R C	1856	21	0	10	0
270	Rochester	University of Rochester	Bapt	1850	0	0	23	1
271	Schenectady	Union University*	Nonsect	1795	0	0	23	0
272	Syracuse	Syracuse University	M E	1871	0	0	75	12
	NORTH CAROLINA							
273	Belmont	St. Mary's College	R. C	1877	2	0	3	0
274	Chapel Hill	University of North Carolina	State	1795	0	0	47	0
275	Charlotte	Biddle University	Presb	1868	5	0	8	0
276	Davidson	Davidson College	Presb	1837	0	0	19	0
277	Durham	Trinity College	M. E So	1859	6	0	22	0
278	Elon College	Elon College	Christian	1890	5	3	6	3
279	Guilford College	Guilford College	Friends	1837	2	4	7	1
280	Hickory	Lenoir College	Luth	1891	1	1	0	5
281	Newton	Catawba College	Reformed	1851	5	2	5	2
282	Raleigh	Shaw University	Bapt	1865	4	4	6	2
283	Salisbury	Livingstone College	A. M E. Z	1882	5	3	9	1
284	Wake Forest	Wake Forest College	Bapt	1834	0	0	24	0
285	Weaverville	Weaverville College	M E. So	1873	1	1	3	1
	NORTH DAKOTA.							
286	Fargo	Fargo College	Cong	1887	5	5	5	5
287	University	University of North Dakota	State	1884	22	9	22	9
288	Wahpeton	Red River Valley University	M E	1902	5	5	5	5
	OHIO.							
289	Akron	Buchtel College	Univ	1872	3	5	7	2
290	Alliance	Mt. Union College	M. E	1846	11	3	11	2
291	Athens	Ohio University	State	1809	7	8	22	8

*Statistics of 1903–4.
+ Including Barnard College and Teachers' College.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments		Total number (excluding duplicates).		Preparatory department.		Collegiate department.		Graduate department				Professional departments.		Total number (excluding duplicates).		
								Resident		Nonresident.						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0	0	10	0	69	0	23	0	0	0	0	0	0	0	92	0	244
0	0	10	0	13	0	21	0	0	0	0	0	0	0	93	0	245
0	0	35	5	126	37	223	0	2	0	0	0	0	0	353	37	246
0	0	100	0	0	0	1,283	0	91	0	0	0	0	0	1,374	0	247
0	0	18	0	50	0	80	0	0	0	0	0	32	0	162	0	248
0	0	9	9	34	80	7	13	0	0	0	0	0	0	41	93	249
4	1	26	7	70	88	74	54	0	3	0	0	8	2	150	155	250
5	0	16	0	62	0	77	0	0	0	0	0	48	0	187	0	251
0	0	9	0	0	0	43	0	0	0	0	0	0	0	43	0	252
0	0	57	46	336	428	32	237	0	11	0	0	0	0	411	864	253
0	0	45	5	361	0	95	0	0	0	0	0	0	0	456	0	254
0	0	28	0	272	0	41	0	0	0	0	0	0	0	313	0	255
5	0	21	0	120	0	60	0	0	0	1	0	55	0	236	0	256
0	0	30	0	350	0	23	0	0	0	0	0	0	0	373	0	257
21	0	32	2	0	0	104	88	6	5	0	0	238	2	341	94	258
0	0	18	0	0	0	195	0	0	0	0	0	0	0	195	0	259
0	0	16	0	0	0	79	0	0	0	0	0	0	0	79	0	260
12	0	36	0	152	0	227	0	1	0	0	0	41	0	421	0	261
140	0	436	5	0	0	2,288	296	169	24	15	3	595	39	3,159	358	262
0	0	38	0	341	0	98	0	7	0	0	0	0	0	446	0	263
0	0	140	0	2,058	0	756	0	0	0	0	0	0	0	2,814	0	264
		4475	[a]28	0	0	1,213	0	559	223	0	0	1,331	7	[a]3,201	[a]1,037	265
0	0	27	0	154	0	54	0	0	0	0	0	0	0	208	0	266
145	0	215	0	0	0	417	[b]87	170	84	0	0	1,095	37	1,955	342	267
0	0	46	0	387	0	122	0	0	0	0	0	0	0	509	0	268
10	0	24	0	95	0	95	0	0	0	0	0	34	0	224	0	269
0	0	23	1	0	0	193	77	11	6	5	0	0	0	209	83	270
74	0	97	0	0	0	240	0	0	0	0	0	386	0	626	0	271
74	1	160	23	0	0	822	[redacted]	33	12	0	0	276	9	1,282	1,100	272
3	0	12	0	28	0	60	0	0	0	0	0	14	0	123	0	273
21	0	66	0	0	0	404	4	22	2	10	0	240	0	661	6	274
4	0	14	0	83	0	120	0	0	0	0	0	17	0	220	0	275
0	0	19	0	0	0	245	0	1	0	0	0	0	0	246	0	276
3	0	31	0	181	25	[redacted]	51	0	0	0	0	8	0	375	76	277
0	0	9	8	50	15	33	35	0	0	3	0	0	0	86	50	278
0	0	7	5	88	50	43	28	0	0	0	0	0	0	131	78	279
0	0	2	0	20	10	101	70	0	0	0	0	0	0	121	80	280
0	0	5	2	61	28	[redacted]	8	0	0	0	0	0	0	72	36	281
11	0	17	13	120	166	35	14	0	0	0	0	198	0	324	180	282
2	0	17	6	153	242	23	5	0	0	0	0	33	0	209	247	283
1	0	24	0	0	[redacted]	232	0	1	0	0	0	80	0	313	0	284
0	0	4	2	79	66	32	21	0	0	0	0	0	0	111	87	285
0	0	7	6	33	34	25	29	0	0	0	0	0	0	72	159	286
9	0	31	9	85	80	94	23	5	1	0	0	47	2	297	158	287
0	0	5	5	62	25	12	5	0	0	0	0	0	0	99	[redacted]	288
0	0	10	7	39	43	37	44	0	0	0	0	0	0	76	[redacted]	289
0	0	17	10	80	82	48	38	0	0	0	0	0	0	253	274	290
0	0	29	15	203	294	182	119	7	3	0	0	0	0	531	516	291

[b] Students of collegiate division at Washington Square. The college at University Heights is not coeducational.

TABLE 29.—*Statistics of universities and colleges*

	Location.	Name.	Religious or non-sectarian control.	Year of first opening.	Professors and instructors.			
					Preparatory department.		Collegiate department.	
					Men.	Women.	Men.	Women.
	1	2	3	4	5	6	7	8
	OHIO—continued.							
292	Berea	Baldwin University	M. E	1846	4	...	24	4
293	do	German Wallace College	M. E	1864	6	6	9	0
294	Cedarville	Cedarville College	Ref. Presb	1894	4	1	5	2
295	Cincinnati	St. Xavier College	R. C	1831	9	0	9	0
296	do	University of Cincinnati	City	1874	6	4	45	8
297	Cleveland	St. Ignatius College	R. C	1886	12	0	8	0
298	do	Western Reserve University	Nonsect	1826	0	0	52	4
299	Columbus	Capital University	Luth	1850	1	0	4	0
300	do	Ohio State University	State	1873	0	0	116	14
301	Dayton	St. Mary's Institute	R. C	1852	4	0	16	0
302	Defiance	Defiance College	Christian	1895	3	2	4	2
303	Delaware	Ohio Wesleyan University	M. E	1844	9	7	41	9
304	Findlay	Findlay College*	Ch. of God	1884	1	0	3	1
305	Gambier	Kenyon College	P. E	1825	13	0	14	0
306	Granville	Denison University	Bapt	1831	7	4	16	4
307	Hiram	Hiram College	Christian	1850	0	3	11	0
308	Lima	Lima College*	Luth	1893	5	4	5	4
309	Marietta	Marietta College	Nonsect	1835	3	2	12	4
310	New Athens	Franklin College	Nonsect	1826	...	...	5	3
311	New Concord	Muskingum College	U. Presb	1837	7	2	8	5
312	Oberlin	Oberlin College	Nonsect	1833	9	9	32	9
313	Oxford	Miami University	State	1824	12	4	22	2
314	Richmond	Richmond College*	Nonsect	1835	2	1	2	1
315	Rio Grande	Rio Grande College	Free Bapt	1876	3	2	3	2
316	Scio	Scio College	M. E	1857	2	2	5	1
317	Springfield	Wittenberg College	Luth	1845	5	1	14	1
318	Tiffin	Heidelberg University	Reformed	1850	6	0	10	0
319	Westerville	Otterbein University	U. B	1847	5	3	10	2
320	West Lafayette	West Lafayette College	Meth. Prot	...	0	3	8	3
321	Wilmington	Wilmington College	Friends	1870	2	5	5	2
322	Wooster	University of Wooster	Presb	1870	9	5	18	2
323	Yellow Springs	Antioch College	Nonsect	1853	7	2	7	1
	OKLAHOMA.							
324	Norman	University of Oklahoma	Territory	1892	5	0	25	0
	OREGON.							
325	Albany	Albany College	Presb	1867	8	1	7	1
326	Dallas	Dallas College	Un. Evang	1900	2	1	5	2
327	Eugene	University of Oregon	State	1876	...	...	28	9
328	Forest Grove	Pacific University	Cong	1853	2	2	11	5
329	McMinnville	McMinnville College	Bapt	1858	5	4	5	4
330	Newberg	Pacific College*	Friends	1901	3	3	3	2
331	Philomath	Philomath College	U. B	1866	3	5	3	5
332	Salem	Willamette University*	M. E	1844	7	5	7	5
	PENNSYLVANIA							
333	Allegheny	Western University of Pennsylvania	Nonsect	1790	0	0	18	0
334	Allentown	Muhlenberg College	Luth	1867	2	0	13	0
335	Annville	Lebanon Valley College*	U. B	1866	6	1	24	2
336	Beatty	St. Vincent College	R. C	1846	27	0	8	0
337	Beaver	Beaver College	M. E	1853	4	4	5	4
338	Beaver Falls	Geneva College	Ref. Presb	1849	8	1	8	1
339	Bethlehem	Moravian College	Moravian	1807	0	0	6	0
340	Carlisle	Dickinson College	M. E	1783	9	0	10	0
341	Chester	Pennsylvania Military College	Nonsect	1862	14	0	14	0
342	Collegeville	Ursinus College	Reformed	1870	4	1	10	0
343	Easton	Lafayette College	Presb	1832	0	0	30	0
344	Gettysburg	Pennsylvania College	Luth	1832	3	0	10	0
345	Grove City	Grove City College	Nonsect	1884	1	1	13	8
346	Haverford	Haverford College	Friends	1833	0	0	20	0

*Statistics of 1903–4.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments.		Total number (excluding duplicates).		Preparatory department.		Collegiate department.		Graduate department.				Professional departments.		Total number (excluding duplicates).		
								Resident.		Nonresident.						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	[illegible]	20	21	22	23	24	
5	0	33	4	128	27	92	46	0	0	0	0	131	2	351	75	293
4	0	12	0	50	81	44	21	0	0	0	0	36	0	130	102	293
0	0	6	2	11	4	20	10	0	0	0	0	0	0	35	29	294
0	0	26	0	278	0	106	0	0	0	0	0	0	0	425	0	295
108	0	159	12	119	0	372	241	17	30	0	0	303	0	841	211	296
0	0	18	0	233	0	53	0	0	0	0	0	0	0	286	0	297
96	0	158	[illegible]	0	0	250	242	8	3	0	0	276	0	537	271	298
4	0	10	0	41	0	76	0	0	0	0	0	33	0	150	0	299
11	0	126	14	0	0	1,348	271	34	20	0	0	178	1	1,544	291	300
0	0	20	0	140	0	200	0	0	0	0	0	0	0	340	0	301
2	0	9	5	140	60	40	20	0	0	0	0	22	8	202	88	302
60	1	112	20	132	43	350	289	3	12	28	8	74	9	652	522	303
0	0	5	[illegible]	14	10	24	5	1	0	4	0	0	0	66	25	304
5	0	31	0	90	0	128	0	0	0	0	0	13	0	229	0	305
0	0	21	12	138	59	194	103	0	0	0	0	0	0	321	162	306
0	0	15	7	70	28	130	51	32	9	0	0	0	0	208	107	307
0	0	5	4	28	13	6	10	0	0	0	0	0	0	61	188	308
0	0	16	9	65	41	64	32	0	0	0	0	0	0	180	151	309
0	0	5	3	[illegible]	[illegible]	75	25	0	0	0	0	0	0	75	25	310
0	0	15	10	58	46	79	61	0	0	0	0	0	0	147	146	311
6	0	66	28	214	148	282	372	12	4	0	0	51	0	637	1,020	312
0	0	23	4	56	19	115	42	0	0	0	0	0	0	268	179	313
0	0	2	1	13	14	5	0	0	0	6	0	0	0	24	14	314
0	0	3	2	16	14	6	5	1	0	0	0	0	0	88	76	315
2	0	10	5	12	15	21	6	0	0	0	0	33	0	130	127	316
3	0	20	5	90	53	126	66	2	0	0	0	26	0	236	128	317
0	0	11	0	55	15	57	32	2	1	0	0	0	0	114	48	318
0	0	22	7	68	50	99	60	0	0	0	0	0	0	227	174	319
0	0	6	3	39	28	37	26	0	0	0	0	0	0	76	54	320
0	0	6	5	39	49	18	19	0	[illegible]	0	0	0	0	57	69	321
0	0	28	9	127	85	311	215	0	0	0	0	0	0	455	411	322
0	0	7	2	20	13	18	7	1	0	0	0	0	0	39	[illegible]	323
4	0	33	0	135	50	100	40	3	0	0	0	50	0	356	119	324
0	0	11	3	28	27	15	11	0	0	0	0	0	0	78	46	325
0	0	5	2	29	36	16	50	0	0	0	0	0	0	45	88	326
29	0	57	9	[illegible]	[illegible]	187	88	2	2	1	1	134	13	337	169	327
0	0	11	5	79	83	25	21	0	3	0	0	0	0	104	107	328
0	0	5	4	25	10	47	22	0	0	0	0	0	0	98	81	329
0	0	4	4	22	28	26	28	0	0	0	0	0	0	53	80	330
0	0	3	5	19	16	12	11	0	0	0	0	0	0	42	43	331
13	0	32	8	80	83	21	12	0	0	0	0	43	3	180	159	332
113	0	131	0	0	0	151	52	3	0	0	0	650	4	807	55	333
0	0	15	0	35	0	82	0	0	0	0	0	0	0	117	0	334
0	0	24	5	120	79	140	30	0	0	0	0	0	0	290	176	335
6	0	35	0	309	0	48	0	28	0	0	0	30	0	431	0	336
0	0	7	8	40	52	10	23	0	0	0	0	0	0	71	201	337
0	0	10	6	43	23	56	28	0	0	0	0	0	0	99	52	338
4	0	7	0	0	0	25	0	0	0	5	0	10	0	[illegible]	0	339
7	0	32	0	128	11	198	49	16	1	0	0	60	0	398	61	340
0	0	14	0	22	0	111	0	0	0	0	0	0	0	133	0	341
4	0	18	1	75	25	68	17	0	0	4	2	25	0	172	44	342
0	0	30	0	0	0	396	0	7	0	4	0	0	0	407	0	343
0	0	13	0	39	20	168	29	0	0	0	0	0	0	207	49	344
1	0	14	9	76	80	201	97	0	0	0	0	0	0	327	275	345
0	0	20	0	0	0	140	0	6	0	0	0	0	0	146	0	346

TABLE 29.—*Statistics of universities and colleges*

	Location.	Name.	Religious or non-sectarian control.	Year of first opening	Professors and instructors.			
					Preparatory department.		Collegiate department.	
					Men.	Women.	Men	Women.
	1	2	3	4	5	6	7	8
	PENNSYLVANIA—con.							
347	Huntingdon	Juniata College	Ger. Bapt.	1876	14	1	9	1
348	Lancaster	Franklin and Marshall College	Reformed.	1836	7	0	14	0
349	Lewisburg	Bucknell University	Bapt	1846	8	10	33	0
350	Lincoln University	Lincoln University	Presb.	1854	4	0	11	0
351	Meadville	Allegheny College	M E	1815	7	2	14	2
352	Myerstown	Albright College	Un. Evang.	1881	8	1	12	1
353	New Wilmington	Westminster College	Un. Presb	1852	6	5	9	4
354	Philadelphia	Central High School	City	1837	0	0	63	0
355	do	Temple College	Nonsect	1891	15	6	14	3
356	do	University of Pennsylvania	Nonsect	1740	0	0	131	0
357	Pittsburg	Holy Ghost College	R. C	1878	8	0	17	0
358	Selinsgrove	Susquehanna University	Luth	1858	4	1	6	1
359	South Bethlehem	Lehigh University	Nonsect	1866	0	0	59	0
360	State College	Pennsylvania State College	State	1859	6	1	55	6
361	Swarthmore	Swarthmore College	Friends	1860	0	0	24	6
362	Villanova	Villanova College	R. C	1842	15	0	9	0
363	Volant	Volant College*	Nonsect	1863	3	2	3	2
364	Washington	Washington and Jefferson College	Presb.	1802	7	0	22	0
365	Waynesburg	Waynesburg College	Cumb Presb	1851	11	6	11	6
	RHODE ISLAND							
366	Providence	Brown University	Bapt.	1764	0	0	77	3
	SOUTH CAROLINA.							
367	Charleston	College of Charleston	City	1790	0	0	8	0
368	Clinton	Presbyterian College of South Carolina	Presb.	1880	3	0	6	0
369	Columbia	Allen University	A. M. E.	1881	1	2	5	2
370	do	South Carolina College[a]	State	1805	0	0	24	7
371	Due West	Erskine College	A. R Presb	1839	2	0	7	0
372	Greenville	Furman University	Bapt	1852	3	0	10	0
373	Newberry	Newberry College	Luth	1858	1	0	10	0
374	Orangeburg	Claflin University	M E	1869	7	7	7	7
375	Spartanburg	Wofford College	M. E. So	1854	5	0	11	0
	SOUTH DAKOTA.							
376	Huron	Huron College	Presb.	1883	6	5	6	5
377	Mitchell	Dakota Wesleyan University	M E	1885	4	8	7	1
378	Redfield	Redfield College	Cong	1887	6	4	4	4
379	Vermillion	University of South Dakota	State	1882	10	10	24	10
380	Yankton	Yankton College	Cong	1882	10	2	10	2
	TENNESSEE.							
381	Athens	Grant University*	M E.	1867	0	5	7	2
382	Bristol	King College	Presb	1869	3	0	3	0
383	Clarksville	Southwestern Presbyterian University.	Presb	1855	0	0	7	0
384	Ilwassee College	Ilwassee College	Nonsect	1840	1	1	2	1
385	Jackson	Southwestern Baptist University	Bapt	1847	..	2	7	..
386	Jefferson City	Carson and Newman College	Bapt	1851	8	1	12	5
387	Knoxville	Knoxville College	Un Presb	1875	8	9	5	2
388	do	University of Tennessee	State	1794	0	0	39	4
389	Lebanon	Cumberland University	Cumb. Presb	1842	0	0	8	1
390	McKenzie	Bethel College	Cumb. Presb	1850	0	1	2	2
391	Maryville	Maryville College	Presb	1819	3	1	12	8
392	Memphis	Christian Brothers' College	R. C	1871	7	0	8	0
393	Milligan	Milligan College	Christian	1882	5	5	3	3
394	Nashville	Fisk University	Cong.	1866	7	6	6	6
395	do	Roger Williams University	Bapt	1865	0	4	2	6
396	do	Vanderbilt University	M E. So.	1875	..	..	30	0
397	do	Walden University	M. E.	1866	5	2	3	3

*Statistics of 1903–4.

[a] Changed to University of South Carolina in 1906.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments.		Total number (excluding duplicates).		Preparatory department.		Collegiate department.		Graduate department.				Professional departments.		Total number (excluding duplicates).		
								Resident.		Nonresident.						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
4	0	18	1	140	124	25	3	0	0	0	0	9	5	174	132	347
7	0	27	0	185	0	186	0	3	0	0	0	48	0	405	0	348
0	0	41	10	79	96	288	88	0	0	73	26	0	0	440	281	349
8	0	16	0	29	0	96	0	0	0	0	0	59	0	184	0	350
0	0	20	3	115	31	190	77	4	1	0	0	0	0	309	109	351
0	0	16	3	36	9	46	6	2	0	0	0	0	0	118	68	352
0	0	12	7	37	28	129	57	0	0	0	0	0	0	170	103	353
0	0	63	0	0	0	2,179	0	0	0	0	0	0	0	2,179	0	354
75	3	76	8	251	107	48	27	0	0	0	0	212	6	511	133	355
217	0	325	0	0	0	1 102	44	169	44	0	0	1,285	2	2,721	254	356
0	0	25	0	125	0	200	0	10	0	16	0	0	0	351	0	357
3	0	23	1	51	12	38	13	0	0	0	0	17	0	158	97	358
0	0	59	0	0	0	623	0	7	0	0	0	0	0	630	0	359
0	0	55	0	49	0	630	7	1	0	0	0	0	0	680	7	360
0	0	24	6	0	0	127	116	1	1	0	0	0	0	128	117	361
3	0	21	0	157	0	53	0	0	0	0	0	12	0	222	0	362
0	0	6	4	47	28	15	15	0	0	0	0	0	0	62	43	363
0	0	27	0	116	0	246	0	2	0	1	2	0	0	365	2	364
0	0	11	0	52	51	41	24	1	0	0	0	0	0	94	75	365
0	0	77	3	0	0	681	203	47	28	13	16	0	0	741	247	366
0	0	8	0	0	0	71	0	0	0	0	0	0	0	71	0	367
0	0	6	0	23	0	32	10	0	0	0	0	0	0	55	16	368
3	0	9	4	87	98	13	2	0	0	0	0	30	0	189	188	369
2	0	24	7	0	0	243	16	9	1	0	0	30	0	282	17	370
3	0	12	0	27	7	122	20	0	0	0	0	6	0	136	22	371
0	0	13	0	65	0	118	0	0	0	0	0	0	0	183	0	372
0	0	10	0	42	0	97	26	4	0	16	0	0	0	130	26	373
0	0	7	7	79	65	15	4	0	0	0	0	0	0	94	69	374
0	0	16	0	167	0	222	1	0	0	0	0	0	0	389	4	375
0	0	6	5	180	186	14	10	0	0	0	0	0	0	194	196	376
0	0	11	9	94	50	41	18	0	0	0	0	0	0	212	251	377
0	0	8	6	59	26	13	9	0	0	0	0	0	0	94	97	378
0	0	24	10	170	56	80	63	4	3	1	1	47	1	276	141	379
0	0	12	6	72	32	35	22	0	1	0	0	0	0	125	149	380
44	0	55	7	310	276	16	10	0	0	0	0	207	1	623	287	381
0	0	3	0	13	0	27	1	0	0	0	0	0	0	40	1	382
3	0	9	0	0	0	62	0	0	0	0	0	12	0	74	0	383
0	0	3	2	36	32	34	18	0	0	0	0	0	0	70	50	384
0	0	7	2	42	33	34	26	0	0	0	0	0	0	76	59	385
0	0	12	5	133	67	65	38	0	0	0	0	0	0	200	103	386
3	0	16	11	43	55	13	3	0	0	0	0	1	0	62	58	387
49	0	84	4	0	0	268	130	4	4	0	0	334	2	594	136	388
11	0	20	5	0	0	63	21	0	0	5	2	189	7	257	129	389
0	0	2	3	20	25	60	55	0	0	0	0	0	0	80	80	390
0	0	15	9	283	194	60	65	0	0	0	0	0	0	343	259	391
0	0	18	0	187	0	35	0	0	0	0	0	0	0	297	0	392
0	0	8	6	25	20	30	25	0	0	0	0	0	0	55	45	393
3	0	10	20	73	24	65	30	0	0	0	0	9	0	234	306	394
3	0	5	10	142	118	19	4	0	0	0	0	7	0	168	122	395
64	0	78	0	....	....	236	39	38	22	0	0	301	1	636	48	396
41	2	39	9	191	98	52	83	0	0	0	0	434	6	687	194	397

TABLE 29.—*Statistics of universities and colleges*

	Location.	Name.	Religious or non-sectarian control.	Year of first opening.	Professors and instructors.			
					Preparatory department.		Collegiate department.	
					Men.	Women.	Men.	Women.
	1	2	3	4	5	6	7	8
	TENNESSEE—cont'd							
398	Sewanee	University of the South	P. E.	1868	0	0	14	0
399	Spencer	Burritt College	Christian.	1848	1	1	3	1
400	Sweetwater	Tennessee Military Institute	Nonsect.	1874	5	2	4	0
401	Tusculum	Greenville and Tusculum College	Presb.	1794	5	2	6	6
402	Washington College	Washington College	Presb.	1795	2	1	5	3
	TEXAS.							
403	Austin	St. Edward's College*	R. C.	1885	9	0	7	0
404	do	University of Texas	State	1883	0	0	61	17
405	Brownwood	Howard Payne College	Bapt.	1890	4	1	4	2
406	Fort Worth	Fort Worth University	M. E.	1881	0	4	6	2
407	do	Polytechnic College	M. E. So.	1891	5	2	6	0
408	Galveston	St Mary's University	R. C.	1854	2	0	4	0
409	Georgetown	Southwestern University*	M. E. So.	1873	4	1	12	0
410	Greenville	Burleson College	Bapt.	1893	5	0	4	0
411	Marshall	Wiley University	M. E.	1873	4	2	4	2
412	North Waco	Texas Christian University*	Christian.	1873	1	3	8	1
413	Sherman	Austin College	Presb.	1850	6	0	6	0
414	Waco	Baylor University	Bapt.	1845	7	7	15	2
415	do	Paul Quinn College	A. M. E.	1881	3	1	5	1
416	Waxahachie	Trinity University.	Cumb. Presb.	1869	14	3	14	3
	UTAH.							
417	Logan	Brigham Young College	L. D. Saints.	1878	16	11	16	2
418	Salt Lake City	University of Utah	State	1850	17	2	29	1
	VERMONT							
419	Burlington	University of Vermont and State Agricultural College	State	1800	0	0	36	0
420	Middlebury	Middlebury College	Nonsect.	1800	0	0	12	0
421	Northfield	Norwich University.	Nonsect.	1834	0	0	8	0
	VIRGINIA.							
422	Ashland	Randolph-Macon College	M. E. So.	1832	..	..	11	
423	Bridgewater	Bridgewater College	Ger. Bapt.	1879	9	3	5	0
424	Charlottesville	University of Virginia	State	1825	0	0	20	0
425	Emory	Emory and Henry College	M. E. So.	1838	3	0	7	0
426	Fredericksburg	Fredericksburg College	Presb.	1893	7	4	7	4
427	Hampden-Sidney	Hampden-Sidney College.	Presb.	1776	0	0	7	0
428	Lexington	Washington and Lee University.	Nonsect.	1749	0	0	26	0
429	Richmond	Richmond College	Bapt.	1832	0	0	14	0
430	do	Virginia Union University	Bapt.	1899	5	4	4	0
431	Salem	Roanoke College	Luth.	1853	2	0	10	0
432	Williamsburg	College of William and Mary	State	1693	..	..	9	0
	WASHINGTON							
433	Burton	Vashon College	Nonsect.	1892	3	2	2	2
434	Seattle	University of Washington.	State	1862	.	.	38	6
435	Spokane	Gonzaga College	R. C.	1887	3	0	21	0
436	Tacoma	University of Puget Sound*	M. E.	1903	7	3	5	2
437	do	Whitworth College	Presb.	1890	4	5	9	7
438	Walla Walla	Whitman College	Cong.	1866	8	4	10	8
	WEST VIRGINIA							
439	Barboursville	Morris Harvey College	M. E. So.	1888	5	5	3	3
440	Bethany	Bethany College.	Christian.	1841	2	1	8	5
441	Elkins	Davis and Elkins College	Presb.	1904	5	0	5	0
442	Morgantown	West Virginia University	State	1868	4	3	39	6

*Statistics of 1903–4.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments.		Total number (excluding duplicates).		Preparatory department.		Collegiate department.		Graduate department.				Professional departments.		Total number (excluding duplicates).		
								Resident.		Nonresident.						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
32	0	41	0	183	0	150	0	0	0	0	0	179	0	480	0	398
6	0	9	5	43	27	106	38	0	0	0	0	0	0	149	65	399
0	0	5	2	45	6	5	3	0	0	0	0	0	0	50	11	400
0	0	7	6	106	82	18	26	0	0	0	0	0	0	124	108	401
0	0	7	4	57	47	18	15	0	0	0	0	0	0	75	62	402
0	0	17	0	175	0	80	0	0	0	0	0	0	0	255	0	403
28	3	89	20	0	0	501	297	11	10	0	0	413	27	901	334	404
6	0	6	6	91	95	42	48	0	0	0	0	0	0	133	162	405
32	0	42	8	64	51	23	9	0	0	0	0	176	1	300	264	406
0	0	17	4	240	160	60	40	0	0	0	0	0	0	300	200	407
0	0	6	0	34	0	46	0	0	0	0	0	0	0	80	0	408
37	0	52	7	120	54	130	55	1	1	0	0	35	3	293	145	409
0	0	5	3	37	30	77	63	0	0	0	0	0	0	114	93	410
0	0	4	2	46	18	24	9	0	0	0	0	0	0	70	27	411
4	0	16	6	108	80	60	40	1	1	0	0	30	7	236	192	412
0	0	0	0	32	0	70	0	0	0	4	0	0	0	106	0	413
34	0	62	12	188	102	250	250	2	3	8	3	154	5	606	363	414
1	0	9	2	20	25	26	29	0	0	0	0	10	1	56	56	415
0	0	14	3	61	60	70	22	0	0	0	0	0	0	131	82	416
0	0	72	13	335	401	37	29	0	0	0	0	0	0	385	440	417
0	0	38	5	241	292	230	141	0	0	0	0	0	0	477	433	418
33	0	69	0	0	0	265	55	1	0	0	0	193	0	476	65	419
0	0	12	0	0	0	81	53	0	0	0	0	0	0	81	53	420
0	0	8	0	0	0	120	0	0	0	0	0	0	0	120	0	421
0	0	11				138	3	0	0	0	0	0	0	138	3	422
0	0	9	3	120	75	10	4	0	0	0	0	0	0	130	79	423
28	0	60	0	0	0	304	0	32	0	0	0	345	0	706	0	424
0	0	0	0	72	0	77	0	0	0	0	0	0	0	149	0	425
0	0	7	4	50	80	20	15	0	0	0	0	0	0	70	95	426
0	0	7	0	0	0	72	0	0	0	0	0	0	0	72	0	427
4	0	30	0	0	0	273	0	12	0	0	0	50	0	335	0	428
3	0	17	0	0	0	190	18	0	0	0	0	30	0	220	18	429
3	0	12	4	174	0	28	0	0	0	0	0	47	0	250	0	430
0	0	13	0	35	7	95	20	4	0	0	0	0	0	158	27	431
0	0	9	0			105	0	0	0	0	0	0	0	195	0	432
0	0	5	4	61	17	12	7	0	0	0	0	0	0	73	24	433
3	0	41	6			376	294	16	36	0	0	84	8	473	338	434
2	0	26	0	105	0	160	0	20	0	0	0	12	0	442	0	435
0	0	7	4	70	43	21	16	0	0	0	0	0	0	107	130	436
0	0	9	7	42	61	32	34	0	0	0	0	0	0	74	95	437
0	0	14	9	123	88	47	43	3	2	1	1	0	0	174	134	438
0	0	5	5	61	75	15	7	0	0	0	0	0	0	76	82	439
6	0	30	7	30	19	130	56	0	0	0	0	9	0	169	75	440
0	0	5	0	26	16	10	2	0	0	0	0	0	0	36	18	441
5	0	53	11	183	70	418	251	2	0	0	0	211	0	778	327	442

TABLE 20.—*Statistics of universities and colleges*

	Location.	Name.	Religious or non-sectarian control.	Year of first opening	Professors and instructors.			
					Preparatory department.		Collegiate department	
					Men.	Women.	Men.	Women.
	1	2	3	4	5	6	7	8
	WISCONSIN.							
443	Appleton	Lawrence University	Nonsect	1849	8	3	16	4
444	Beloit	Beloit College	do.	1847	6	0	23	2
445	Madison	University of Wisconsin	State	1850	0	0	222	25
446	Milton	Milton College	7th D. Bapt	1844	0	1	7	4
447	Milwaukee	Concordia College	Luth	1881	0	0	9	0
448	do.	Marquette College	R C	1881	9	0	8	0
449	Plymouth	Mission House	Reformed	1859	13	0	11	0
450	Ripon	Ripon College	Nonsect	1853	7	5	12	3
451	Watertown	Northwestern University	Luth	1865	5	0	6	0
452	Waukesha	Carroll College	Presb.	1846	7	3	7	3
	WYOMING.							
453	Laramie	University of Wyoming	State	1887	6	4	13	5

* Statistics of 1903–4.

for men and for both sexes—Continued.

Professors and instructors.				Students.												
Professional departments.		Total number (excluding duplicates)		Preparatory department.		Collegiate department.		Graduate department.				Professional departments.		Total number (excluding duplicates).		
								Resident		Nonresident						
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0	0	25	3	48	30	116	120	0	1	5	1	0	0	235	248	443
0	0	28	2	172	0	151	91	0	2	0	0	0	0	310	138	444
10	0	232	25	0	0	1,964	715	119	29	0	0	183	0	2,206	744	445
0	0	7	5	34	29	16	16	0	0	0	0	0	0	71	67	446
0	0	9	0	100	0	152	0	0	0	0	0	0	0	252	0	447
0	0	17	0	138	0	107	0	0	0	0	0	0	0	245	0	448
4	0	15	0	44	0	31	3	0	0	0	0	15	0	90	3	449
0	0	12	5	9	13	39	44	0	0	0	0	0	0	56	95	450
0	0	11	0	128	6	51	1	0	0	0	0	0	0	179	7	451
0	0	9	6	81	40	21	15	0	0	0	0	0	0	122	80	452
0	0	13	5	26	18	40	22	1	1	1	0	0	0	92	121	453

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering.	Chemical engineering	Mining engineering.
	1	2	3	4	5	6	7	8
	ALABAMA.							
1	Howard College	100						
2	Southern University	131						
3	St. Bernard College	45						
4	Spring Hill College	130	0	0	0	0	0	0
5	University of Alabama	241			14			8
	ARIZONA.							
6	University of Arizona	12			2			11
	ARKANSAS.							
7	Henderson College	68						
8	Ouachita College	226						
9	Arkansas College	43						
10	Arkansas Cumberland College	23						
11	Hendrix College	41						
12	University of Arkansas	248	9	15	78	36	7	2
13	Philander Smith College	21						
	CALIFORNIA.							
14	University of California	1,418	106	[a] 266	207			285
15	Pomona College	183						
16	Occidental College	107						
17	St. Vincent's College*	110						
18	University of Southern California	184						
19	California College	7						
20	St. Mary's College	65			38			20
21	Throop Polytechnic Institute	5	0	0	0	10	0	0
22	St. Ignatius College	102						
23	University of the Pacific	23						
24	Santa Clara College	96	0	0	0	0	0	0
25	Leland Stanford Junior University	1 046		71	118	110		124
	COLORADO.							
26	University of Colorado*	381		16	43	96	13	
27	Colorado College	278			11	10		12
28	College of the Sacred Heart	50						
29	University of Denver	366						
	CONNECTICUT.							
30	Trinity College	131			17			
31	Wesleyan University	292						
32	Yale University	1,275	[b] 63	90	85	67		45
	DELAWARE.							
33	State College for Colored Students		25					
34	Delaware College	26	7	9	38	32		
	DISTRICT OF COLUMBIA.							
35	Catholic University of America	8		1	7	3	1	
36	Gallaudet College	76						
37	Georgetown University	84						
38	George Washington University	378		16	53	37	15	
39	Gonzaga College	7						
40	Howard University	43						
41	St. John's College	35						

*Statistics of 1903–4. [a] Includes electrical engineering students. [b] Forestry.

colleges for men and for both sexes.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill.	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
					100	60					170			1
					75	50								2
					31	22			55	0		18	11	3
0	0	0	0	0	106	85	0	0	80	0	0	36		4
					174	86								5
1					5	2	8	1	12	17	62			6
					52	15			7	15		45	7	7
					80	20			15	25	180	205	40	8
					43	13								9
					23	4			6	2		38	14	10
					41	20								11
					101	12	85	68			407	19	5	12
					23	21	26	37	11	13		81		13
	8			125	301	122	58	209	58	0	1,000		243	14
					60	25	0	3				69	15	15
												52		16
					60	50			40	0	250			17
					183	49			25	14		112	60	18
					5	1								19
					42	12	7	0	78	0		48	12	20
0	0	0	0	0	0	0	3	17	29	14	0	0	194	21
					162	125			70	0		83		22
												127	28	23
0		0			213	172	0	0	94	0	0	68	28	24
					62	10								25
					110	42	24	50				48		26
0					53	52	35	41				40	4	27
					46	40			102	0		53		28
														29
					50	40								30
					216	117								31
		3												32
			14		42	6					50			33
											108			34
					51	0	2	3					22	35
					84	61						11		36
	10				63	14								37
					7	7					76			38
					31	29	10	38	13	20		91		39
										0				40
														41

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering	Chemical engineering.	Mining engineering.
	1	2	3	4	5	6	7	8
	FLORIDA.							
42	John B. Stetson University *	46		2		1		
43	University of Florida	13	26	9	3			
44	St. Leo College	20						
45	Florida State College *	118						
46	Rollins College	27						
	GEORGIA							
47	University of Georgia	132	56		50	18		
48	Atlanta Baptist College	16	0	0	0	0	0	0
49	Atlanta University	44						
50	Morris Brown College	9						
51	Bowdon College *	90						
52	North Georgia Agricultural College	38	20					10
53	Mercer University	196						
54	Emory College	223						
55	Clark University	23						
56	Nannie Lou Warthen Institute	112						
57	Young Harris College	200						
	IDAHO							
58	University of Idaho	63	2	28	11	28		41
	ILLINOIS.							
59	Hedding College	50						
60	Illinois Wesleyan University	105						
61	St. Viateur's College	150						
62	Blackburn College	32						
63	Carthage College	48						
64	St. Ignatius College *	88						
65	St. Stanislaus College	138						
66	University of Chicago	1,288						
67	James Millikin University	75		25	20	15		
68	Evangelical Proseminary							
69	Eureka College	60						
70	Northwestern University	818						
71	Ewing College	24						
72	Knox College	222						
73	Lombard College	65						
74	Greenville College	37						
75	Illinois College	101						
76	Lake Forest College	149						
77	McKendree College	43						
78	Lincoln College	33						
79	Monmouth College	198						
80	Northwestern College	115						
81	St. Bede College							
82	St. Francis Solanus College	163						
83	Augustana College	86						
84	Shurtleff College	54						
85	University of Illinois	539	329	221	315	223	20	
86	Westfield College	12						
87	Wheaton College	63						
	INDIANA.							
88	Indiana University	1 000						
89	St. Joseph's College	12						
90	Wabash College	250						
91	Concordia College	130						
92	Franklin College	86						
93	De Pauw University	456						
94	Hanover College	79						
95	Butler College	181						

*Statistics of 1903-4.

colleges for men and for both sexes—Continued.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill.	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
					27	11	0	11	40	21		110	21	42
					20	8			58	0	225			43
					4	4	5	0	30	0		10	2	44
					80	40	6	40	9	15		72		45
					20	4	2	15	24	8		68	0	46
					126	111	27	0			256			47
	0	0	0	0	13	16	0	0	0	0	0	30	0	48
					26	26	12	34						49
					9	9	0	11	0	0	0	22	6	50
					60	6	5	5	4	0		10	0	51
					20	8	10	1	70	5	170	20		52
					130	40	18	0						53
														54
					19	15	1	8						55
					65	3	12	15				35		56
														57
					18	5	3	2			192	10		58
					30	30	2	3			33	103		59
					40	15								60
					150	60			100	0	208	50		61
					13	3								62
					15	13			33	22		36	18	63
					88	88			114	0		30		64
					137	46								65
				201			77	609						66
			25	20	60	15	5	20	60	70	100	234	139	67
					100	61	7	0				100		68
					40	10	10	2	8	2		12	5	69
					172	96						344		70
					24	10						90		71
					124	19						348		72
					20	15						47	18	73
					12	5	4	8	31	10		58	18	74
												68		75
						15	8	5				52	18	76
					43	31						100		77
							4	3				149	8	78
					71	43						241		79
					58	20	7	7		11		89	35	80
									47	0				81
					101	69			71	0		68		82
							94	53				111	48	83
					23	19						41		84
	100	8	73	52	94	48	30	50			1,051	378	279	85
							3	4	18	4		22		86
									18	18		102	45	87
				300	229	33	120	120					148	88
					47	47	6	0	43	0	119	85	1	89
					69	32								90
					130	130					220	220		91
					86	20						63		92
					100	65	7	14				190	47	93
					62	31								94
												32	34	95

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering.	Chemical engineering.	Mining engineering.
	1	2	3	4	5	6	7	8
	INDIANA—continued.							
96	Union Christian College	23	0	0	0	0	0	0
97	Moores Hill College	44						
98	University of Notre Dame	146		17	72	23		
99	Earlham College	379			29			
100	St. Meinrad College	64	0	0	0	0	0	0
101	Taylor University	37						
	INDIAN TERRITORY							
102	Indian University	11						
103	Henry Kendall College	12						
	IOWA							
104	Coe College	172						
105	Charles City College*	16						
106	Wartburg College	46						
107	Amity College	23						
108	Luther College	117						
109	Des Moines College	54	0	0	0	0	0	0
110	Drake University	332						
111	St. Joseph's College	40	0	0	0	0	0	0
112	Parsons College	72						
113	Upper Iowa University	114						
114	Iowa College	310						
115	Lenox College	31						
116	Simpson College	208						
117	University of Iowa	656		6	59	26		4
118	Grinnell College	10						
119	Palmer College	13						
120	German College	49						
121	Iowa Wesleyan University	80						
122	Cornell College	206	0	0	97	0	0	0
123	Penn College	147						
124	Central University of Iowa	29						
125	Morningside College	137						
126	Buena Vista College	22						
127	Tabor College	52						
128	Western College	46						
	KANSAS							
129	Midland College	70						
130	St. Benedict's College	54						
131	Baker University	380						
132	College of Emporia	92						
133	Highland University	12						
134	Campbell College	16						
135	Kansas City University	24						
136	University of Kansas	673		17	100	99	10	49
137	Kansas Christian College	38						
138	Bethany College	90						
139	Ottawa University	136						
140	St. Mary's College	100						
141	Kansas Wesleyan University	51						
142	Cooper College	33						
143	Washburn College	241						
144	Fairmount College	74						
145	Friends University	76						
146	St. John's Lutheran College	22						
147	Southwest Kansas College	50						
	KENTUCKY							
148	Union College	14						
149	Berea College	34						
150	Central University of Kentucky	140						
151	Georgetown College	189						

*Statistics of 1903-4.

colleges for men and for both sexes—Continued.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill.	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
0	0	0	0	0	20	9			0	0	0	0	0	96
					10	12	18	38	7	4	0	30	0	97
	3				146	104			55	0		27		98
					32	18	41	58				55		99
0	0	0	0	0	64	50	0	0	0	0	0	25	3	100
							2	0	8	4		42		101
					9	2			4	2		23		102
					10	5	0	3	1	0	105	42	22	103
					78	47	10	15				8		104
					16	5	0	0	30	11		25	8	105
					48	48					109	38		106
					10	8	1	14	40	4		77	9	107
					115	115								108
0	0	0	0	0	15	17						127	37	109
					44	40	88	118	42	12	0	389	0	110
0	0	0	0	0	40	40	0	0	70	0	150	25	0	111
					50	20	15	10			118			112
					35	10	40	40	83	11		123	52	113
												104		114
					31	8	5	16	16	10		67	7	115
					133	40	6	25	136	26		236	10	116
					160	74					185			117
					0	0	2	1	16	9		39		118
					10	8			8	4		19	8	119
					42	10	4	4	9	1		47		120
					80	24	3	11	18	9		142		121
	0		0	0	51	25	57	104	51	11	0	148	40	122
					41	23						90		123
					17	13	6	16	30	17		55		124
					20	14	1	55				134		125
					8	3	2	23	28	8	0	63	0	126
					18	9						79	40	127
					22	8			30	5		60	5	128
					70	60	6	14			26	130		129
					54	23			51	0				130
					389	160	25	35	98	33		137	63	131
					30	34	6	13				109		132
					6		0	1				30		133
					18	7	10	12	38	7		60	4	134
					24	5						3		135
														136
					10	4	20	21	30	25		50		137
							5	36	115	60		366	14	138
					175	150	18	21	45	60		253	10	139
					100	100			150	0				140
					20	10	15	16			50	150		141
					48	25	0	10	27	4		43	39	142
					17	16	2	14				169	40	143
					34	10	3	16				154	70	144
							0	13	19	10		74		145
					20	8	0	0	0	5	0	10	0	146
					30	21	19	41	44	17		180		147
					14	12	18	22				31		148
					20	4	85	71				23		149
					103	32								150
														151

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering	Civil engineering.	Electrical engineering.	Chemical engineering.	Mining engineering.
	1	2	3	4	5	6	7	8
	KENTUCKY—continued.							
152	Liberty College							
153	Agricultural and Mechanical College of Kentucky.		17	157	75	0		5
154	Kentucky University	232	0	0	0	0	0	0
155	Bethel College	103	0	0	0	0	0	0
156	St Mary's College	60						
157	Kentucky Wesleyan College	130						
	LOUISIANA							
158	Louisiana State University	49	40	31	57	25	30	
159	Jefferson College	92						
160	Centenary College of Louisiana*	30						
161	College of the Immaculate Conception	49						
162	Leland University	21						
163	New Orleans University*	7						
164	Tulane University of Louisiana	97		[a] 109	37		10	
	MAINE.							
165	Bowdoin College	280						
166	Bates College	353						
167	University of Maine	56	15	38	134	96		
168	Colby College	242						
	MARYLAND.							
169	St. John's College	133		14				
170	Johns Hopkins University	183	0	0	0	0	0	0
171	Loyola College	40	0	0	0	0	0	0
172	Morgan College	10						
173	Washington College	44	0	0	0	0	0	0
174	Rock Hill College	50						
175	St Charles College	50						
176	Mount St Mary's College	127	0	0	0	0	0	0
177	New Windsor College	16						
178	Western Maryland College	156						
	MASSACHUSETTS.							
179	Amherst College	406						
180	Boston College	125	0	0	0	0	0	0
181	Boston University	501						
182	Harvard University	2,009	33	57	68	84	24	66
183	American International College	10						
184	Tufts College	180		11	65	72	2	
185	Williams College	434						
186	Clark University							
187	Collegiate Department, Clark University	88						
188	College of the Holy Cross	219	0	0	0	0	0	0
	MICHIGAN.							
189	Adrian College	42						
190	Albion College	200	0	0	0	0	0	0
191	Alma College	60						
192	University of Michigan	1,229		[c] 194	187	127	57	
193	Detroit College	96						
194	Hillsdale College	120						
195	Hope College	146						
196	Kalamazoo College	219						
197	Olivet College	160						

*Statistics of 1903–4.

[a] Includes sugar engineering students.

colleges for men and for both sexes—Continued.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
												83	24	152
0	0	0	0	0	88	18	60	27	0	0	417	0	0	153
0	0	0	[a]		56	31	10	21			0			154
0	0	0	0	0	25	15	0	0	30	0	0	0	0	155
					50	28			50	0	145	30		156
					118	62	21	28	3	4				157
423				53	37	8			33	0	328	29		158
					92	74			62	0	90	48		159
					26	21								160
					49	49			104	0	366			161
					21	16	14	11				4		162
			2		3	2	0	[a]				80		163
					29	9								164
					51	21	10	0						165
					108	82								166
					17	5	6	3			141			167
					109	32								168
					83	20					202			169
0	0	0	0	0	44	15	0	0	0	0	0	0	0	170
0	0	0	0	0	40	40	0	0	0	0	0	0	0	171
					10	9	9	1						172
0	0	0	0	0	44	4	4	42	13	29	0	8	27	173
												30		174
					50	50								175
0	0	0	0		127	125	0	0	21	0	0	23		176
									4	0		10		177
														178
					160	77								179
0	0	0	0	0	125	125	0	0	0	0	0	0		180
					272	198	5	33				135		181
	44										0			182
					7	6								183
					65	23						11		184
					203	127							23	185
														186
					11	10	6	0						187
0	0	0	0	0	218	207	0	0	0	0	0		0	188
					20	15			2	4		50	6	189
0	0	0	0	0	77	35	34	22	70	50		152	38	190
					56	20	5	6	20	10		115	33	191
302														192
					86	86								193
												115	48	194
												73		195
														196
					75	7	5	13				137	34	197

[a] Includes electrical engineering students.

[c] Includes 15 in marine engineering.

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering.	Chemical engineering.	Mining engineering.
	1	2	3	4	5	6	7	8
	MINNESOTA							
198	St. Johns University	163						
199	Augsburg Seminary	33						
200	University of Minnesota	1,249	29	102	126	101	33	106
201	Carleton College	258						
202	St. Olaf College	131						
203	Hamline University	200						
204	Macalester College	70						
205	Gustavus Adolphus College	59						
206	Parker College	12						
	MISSISSIPPI.							
207	Mississippi College	249						
208	Rust University	8						
209	Millsaps College*	119						
210	University of Mississippi	221	0	0	29	12	0	1
	MISSOURI.							
211	Southwest Baptist College*							
212	Pike College*	26						
213	Missouri Wesleyan College	30						
214	Christian University	167						
215	Clarksburg College	35						
216	University of Missouri	630	76	53	188	140	3	180
217	Centra. College	56						
218	Westminster College	67						
219	Pritchett College*	19						
220	La Grange College	125						
221	William Jewell College	149						
222	Missouri Valley College	110						
223	Park College	175						
224	Christian Brothers College	100		8	4			
225	St. Louis University	48						
226	Washington University	126		5	13	4	5	
227	Drury College	82						
228	Tarkio College	70						
229	Central Wesleyan College	76						
	MONTANA.							
230	University of Montana	95		22				
	NEBRASKA.							
231	Bellevue College	88						
232	Cotner University	36						
233	Union College*	100	0	0	0	10	0	0
234	Doane College	136						
235	Grand Island College	54						
236	Hastings College	38						
237	University of Nebraska	972	11	35	78	102	4	1
238	Creighton University	96						
239	Nebraska Wesleyan University	170						
240	York College	28						
	NEVADA.							
241	Nevada State University	55	1	26	7			1
	NEW HAMPSHIRE							
242	Dartmouth College	357			31			
243	St. Anselm's College	11						

* Statistics of 1903–4.

colleges for men and for both sexes—Continued.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill.	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
					70	32	5	0	72	0		74	9	198
					23	38								199
10			3		203	73	43	150			804	21		200
					121	28	2	13				54		201
					30	70	6	5				34		202
					50	20	10	15				17		203
					70	24	6	4	6	5				204
					50	50			114	14		90	65	205
					9	0	3	1	34	5		35		206
														207
					2	2	16	25				65		208
					71	25								209
0	0	0	0	0	125	62	16	16	0	0	0	0	0	210
														211
					[redacted]	1	2	10	7	[redacted]		22	11	212
														213
					[redacted]	24			25	5		28		214
					35	20	10	20				40		215
		1			159	73	[redacted]	132			174			216
														217
					28	25			5	0				218
					6	3			5	5		19	4	219
														220
														221
												81		222
					65	70						66	15	223
1	3								100	0		50	40	224
					40	33			77	0	160	27		225
100	12				41	25	1	12					311	226
					35	16	2	5						227
					54	56	1	11	52	17		129	10	228
					80	25	32	56	25	7	100	125	35	229
					75	5	0	15				60	45	230
					25	19	13	25	6	4		53	8	231
														232
0	0	0	0	0	23	[redacted]	12	11	14	19	0	34	25	233
					36	18	3	18	19	6		125	10	234
					24	16	7	27	12	10		17		235
					25	13						82		236
124	0	0		0	235	193			0	0	315	400	95	237
					86	86								238
					26	2	41	128	54	16	152	262		239
					22	17	18	45	79	12		86	21	240
				1	28	4	1	37	14	20	132	5		241
				10	[redacted] 11	90 11	26	0						242 243

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering.	Chemical engineering.	Mining engineering.
	1	2	3	4	5	6	7	8
	NEW JERSEY							
244	St. Peter's College	23						
245	St. Benedict's College	21						
246	Rutgers College	54	12	0	70	34	26	0
247	Princeton University	1,061			214	8		
248	Seton Hall College	80						
	NEW MEXICO.							
249	University of New Mexico	15						
	NEW YORK.							
250	Alfred University	59	5	0	0	0	0	0
251	St. Bonaventure's College	77	0	0		0	0	0
252	St. Stephen's College	43						
253	Adelphi College	269	0	0	0	0	0	0
254	Polytechnic Institute of Brooklyn	12	0	10	15	39	11	0
255	St. Francis College	41	0	0	0	0	0	0
256	St. John's College	60	0	0	0	0	0	0
257	Canisius College	23						
258	St. Lawrence University	192						
259	Hamilton College	195						
260	Hobart College	79						
261	Colgate University	227						
262	Cornell University	694	189	1,060	385	0	0	0
263	College of St. Francis Xavier	98						
264	College of the City of New York	756	0	0	0	0	0	0
265	Columbia University	534		101	121	140		223
266	Manhattan College	27			27			
267	New York University	347	0	44	100	0	9	0
268	St. John's College	122	0	0	0	0	0	0
269	Niagara University	95	0	0	0	0	0	0
270	University of Rochester	270	0	0	0	0	0	0
271	Union University*	75			131	27		
272	Syracuse University	1,065		68	63	135		
	NORTH CAROLINA.							
273	St. Mary's College	21						
274	University of North Carolina	363						
275	Biddle University	120						
276	Davidson College	215						
277	Trinity College	239						
278	Elon College	68						
279	Guilford College	71						
280	Lenoir College	125						
281	Catawba College	19						
282	Shaw University	49	0	0	0	0	0	0
283	Livingstone College	28						
284	Wake Forest College	232						
285	Weaverville College	53						
	NORTH DAKOTA.							
286	Fargo College	54						
287	University of North Dakota	62		20				15
288	Red River Valley University	17						
	OHIO.							
289	Buchtel College	81	0	0	0	0	0	0
290	Mount Union College	84						
291	Ohio University	142	0	0	7	55	0	0
292	Baldwin University	73		5	1			
293	German Wallace College	33						
294	Cedarville College	30						

* Statistics of 1903–4.

colleges for men and for both sexes—Continued.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill.	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
					23	23								244
					21	21			72	[illegible]				245
0	0	0	0	0	26	26	14	0	0	0	107	0	0	246
					674	373								247
					80	80			25	0		10		248
					6	4	0	8	3	9		52		249
0	0	0	0	0	13	13	15	9	0	0	[illegible]	25	20	250
0	0	0	0		77	40	0	0	30	0	0	[illegible]		251
					43	43								252
0	0	0	0	0	62	27	1	24	0	0	0	0	117	253
0	0	0	0	0	0	0	0	0	0	0	0	0	0	254
0	0	0	0	0	41	41	0	0	0	0	21	10	0	255
0	0	0	0	0	60	52	0	0	0	0	0	0	0	256
					[illegible]	23						20		257
														258
					195	140	20	0						259
					35	23								260
					60	41	24	0						261
0	68	0	0	0							500			262
					98	98	20	0						263
0	0	0	0	0	203	160	183	0	0	0	0	65	220	264
	78				240	57						44		265
							15	0	25	0		20		266
0	0	0	0	0	54	31	145	173	192	8	0	0	0	267
0	0	0	0	0	61	61	0	0	0	0	285	30	4	268
0	0	0	0	0	90	90	0	0	70	0	95	30	0	269
0	0	0	0	0	183	104	15	15						270
					35	18								271
47	26				730	229	76	127				122	486	272
					51	[illegible]			47	0		10	5	273
														274
					116	[illegible]	65	0			203	53		275
					214	127	0	0						276
														277
					68	25	3	7	10	[illegible]		52	14	278
					41	17								279
					40	25			10	11		32	12	280
					17	14			10	6		30	5	281
0	0	0	0	0	47	24	0	0	0	0	0	42	0	282
					28	28	17	13						283
					174	71	21	0						284
					39				20	0		9		285
					16	9			12	8				286
					56	7	3	62	60	29		34	38	287
					10	4			25	12				288
0	0	0	0	0	36	7	0	0	0	0	0	3		289
					65	[illegible]	26	48	48	36		101	13	290
0	0	0	0	0	120	27	22	31	75	[illegible]	0	191	135	291
29				4			7	28				47	12	292
					42	21			30	11	65	143		293
					30	17						25	8	294

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering.	Chemical engineering.	Mining engineering.
	1	2	3	4	5	6	7	8
	OHIO—continued.							
295	St. Xavier College	108	0	0	0	0	0	0
296	University of Cincinnati	503		22	43	28	13	
297	St. Ignatius College	53						
298	Western Reserve University	492						
299	Capital University	76						
300	Ohio State University	536	99	84	117	104	13	40
301	St. Mary's Institute	200						
302	Defiance College	60						
303	Ohio Wesleyan University	568						
304	Findlay College*	96						
305	Kenyon College	138						
306	Denison University	297						
307	Hiram College	181						
308	Lima College*	18						
309	Marietta College	96	0	0	0	0	0	0
310	Franklin College	100						
311	Muskingum College	143						
312	Oberlin College	654						
313	Miami University	157						
314	Richmond College*							
315	Rio Grande College	10						
316	Scio College	23			4			
317	Wittenberg College	152						
318	Heidelberg University	72						
319	Otterbein University	150						
320	West Lafayette College	63						
321	Wilmington College	37						
322	University of Wooster	306						
323	Antioch College	25						
	OKLAHOMA.							
324	University of Oklahoma	125		9				6
	OREGON.							
325	Albany College	26	0	0	0	0	0	0
326	Dallas College	16						
327	University of Oregon	197		1	20	20		17
328	Pacific University	37	0	0		0	0	0
329	McMinnville College	69						
330	Pacific College*	54						
331	Philomath College	23						
332	Willamette University*	31						
	PENNSYLVANIA.							
333	Western University of Pennsylvania	33		41	57	19	8	2
334	Muhlenberg College	80						
335	Lebanon Valley College*	170						
336	St. Vincent College	48						
337	Beaver College	33						
338	Geneva College	85						
339	Moravian College	23	0	0	0	2	0	0
340	Dickinson College	247						
341	Pennsylvania Military College	0			75			
342	Ursinus College	85						
343	Lafayette College	184			85	51	42	27
344	Pennsylvania College	197						
345	Grove City College	190						
346	Haverford College	118						
347	Juniata College	17						
348	Franklin and Marshall College	186						
349	Bucknell University	376						
350	Lincoln University	96						
351	Allegheny College	187			80			
352	Albright College	52						

* Statistics of 1903–4.

colleges for men and for both sexes—Continued.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill.	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
0	0	0	0	0	108	91	0	0	51	0	0	0	0	295
....	..	..	..	..	128	89	0	13	.....	....	..	..	....	296
..	..	..	..	..	53	53	..	..	....	....	..	..	.....	297
..	..	..	..	.....	175	60	..	..	....	....	..	..	.....	298
..	..	..	..	..	.....	..	..	..	....	....	..	..	....	299
280	15	..	33	.....	99	26	.....	..	....	....	..	..	.....	300
..	..	..	..	..	70	70	..	..	50	0	..	45	..	301
..	..	..	..	..	.....	..	..	..	....	....	..	..	....	302
..	..	..	..	.....	240	110	.....	..	75	26	255	217	30	303
..	..	..	..	.....	50	40	22	10	45	30	....	150	.. ..	304
..	..	..	..	.....	80	45	.....	..	....	....	..	..	....	305
..	..	..	..	..	150	65	.....	..	....	....	..	112	15	306
..	..	..	..	..	.....	..	..	..	36	8	..	66	31	307
..	..	..	..	..	16	4	5	15	..	..	..	185	.....	308
0	0	0	0	0	36	17	.....	..	....	....	..	115	2	309
..	..	..	..	.....	70	16	5	9	5	5	.....	10	....	310
..	..	..	..	.....	75	60	.....	..	....	....	..	90	20	311
..	..	..	..	..	.....	..	..	..	....	....	..	..	....	312
..	..	..	..	.....	15	8	.....	..	....	....	.....	51	63	313
..	..	..	..	.....	3	1	5	6	4	■	.. ..	10	.....	314
..	..	..	..	.....	10	1	.....	..	....	....	..	..	.....	315
..	..	..	..	..	.....	..	9	37	49	31	73	80	.....	316
..	..	..	..	.....	120	42	9	■	....	....	....	58	10	317
..	..	..	..	.....	46	16	.....	..	46	31	....	94	34	318
..	..	..	..	.....	93	26	20	30	.....	....	....	128	66	319
..	..	..	..	.....	63	37	17	5	2	6	.. ..	37	22	320
..	..	..	..	.....	10	6	.....	..	....	....	....	..	..	321
..	..	..	..	.....	108	38	8	6	10	8	.. ..	118	...	322
..	..	..	..	.....	6	.....	3	8	.....	....	.. ..	19	.....	323
..	..	..	..	..	.....	..	..	..	....	....	..	..	..	
...	..	..	..	.....	10	6	.....	.....	2	9	....	113	.....	324
..	..	..	..	..	.....	..	..	..	....	....	..	..	..	
0	0	0	0	0	26	10	.....	..	37	0	0	40	0	325
..	..	..	..	..	16	6	4	2	1	5	....	41	13	326
..	..	..	..	..	52	29	3	2	....	....	..	93	....	327
0	0	0	0	0	24	9	0	0	5	5	0	78	7	328
..	..	..	..	..	32	11	0	3	27	9	.. ..	53	....	329
..	..	..	..	..	.....	.....	.....	..	....	....	.. ..	..	..	330
..	..	..	..	..	.....	.....	.....	.....	11	6	....	33	..	331
..	..	..	..	..	.....	.....	.....	.....	....	....	....	122	33	332
..	..	..	..	..	.....	.....	.....	.....	....	....	....	.. ..	.....	333
..	..	..	..	..	21	12	1	45	....	....	....	.. ..	.....	333
..	..	..	..	..	80	72	40	0	....	....	....	....	....	334
..	..	..	..	..	.....	.....	.....	.....	....	....	....	....	....	335
..	..	..	..	..	46	46	.....	..	55	0	..	70	..	336
..	..	..	..	..	12	3	....	....	....	....	..	179	23	337
..	..	..	..	..	35	28	.....	..	....	....	..	65	....	338
0	0	0	0	0	22	19	4	0	0	0	0	8	0	339
..	..	..	..	..	180	78	....	..	....	....	..	..	....	340
..	..	..	..	..	26	....	....	..	....	....	133	..	....	341
..	..	..	..	..	■	17	5	3	....	....	.. ..	..	....	342
7	....	..	..	..	184	100	6	0	....	....	....	....	....	343
..	..	..	..	..	147	80	.....	..	....	....	....	....	....	344
11	..	..	30	..	■	130	50	100	60	20	120	150	20	345
22	..	..	..	..	50	20	....	..	....	....	....	....	....	346
..	..	..	..	.....	15	....	65	75	32	24	....	31	....	347
..	..	..	..	..	180	132	12	0	....	....	....	....	....	348
..	..	..	..	..	.....	.....	.....	.....	....	....	....	....	....	349
....	....	....	....	.....	85	81	.....	.....	....	....	.....	.....	.....	350
.....	.....	.....	.....	.....	130	52	.....	.....	.....	.....	.....	.....	.....	351
.....	.....	.....	.....	.....	.....	.....	28	12	.....	.....	.....	41	17	352

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering	Chemical engineering.	Mining engineering
	1	2	3	4	5	6	7	8
	PENNSYLVANIA—continued.							
353	Westminster College	186						
354	Central High School	1,641	0	0			0	0
355	Temple College	75						
356	University of Pennsylvania	266		151	168	72	26	
357	Holy Ghost College	200						
358	Susquehanna University	51						
359	Lehigh University	35		160	107	92	8	a 96
360	Pennsylvania State College	58	14	113	154	188	14	80
361	Swarthmore College	163						
362	Villanova College	53						
363	Volant College*	30						
364	Washington and Jefferson College	246						
365	Waynesburg College	65						
	RHODE ISLAND.							
366	Brown University	655						
	SOUTH CAROLINA.							
367	College of Charleston	63		8				
368	Presbyterian College of South Carolina	42	0	0	0	0	0	0
369	Allen University	15						
370	South Carolina College	94	0	0	7	8	0	0
371	Erskine College	140						
372	Furman University	118						
373	Newberry College	123						
374	Claflin University	13	0	0	0	0	0	0
375	Wofford College	226						
	SOUTH DAKOTA.							
376	Huron College	24						
377	Dakota Wesleyan University	59	0	0	0	0	0	0
378	Redfield College	22						
379	University of South Dakota	109		34				
380	Yankton College	57						
	TENNESSEE.							
381	Grant University*	24						
382	King College	27						
383	Southwestern Presbyterian University	62						
384	Hiwassee College	52						
385	Southwestern Baptist University	40	0	0	6	0	0	0
386	Carson and Newman College	103						
387	Knoxville College	16						
388	University of Tennessee	159	21	9	15	27	4	4
389	Cumberland University	63			3			
390	Bethel College	115						
391	Maryville College	125						
392	Christian Brothers College	35						
393	Milligan College	55						
394	Fisk University	91						
395	Roger Williams University	23						
396	Vanderbilt University	182		11	25	14		2
397	Walden University	135						
398	University of the South	138			11			
399	Burritt College	144						
400	Tennessee Military Institute	7			1			
401	Greeneville and Tusculum College	44						
402	Washington College	33						
	TEXAS.							
403	St. Edward's College*	80						
404	University of Texas	547			123	62		23
405	Howard Payne College	90						
406	Fort Worth University	32						
407	Polytechnic College	100						

*Statistics of 1903–4.

a Including 17 in metallurgical engineering.

colleges for men and for both sexes—Continued.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill.	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
														353
0	0	0		480	1,004	275	52	0						354
					23	6			465	412		25	30	355
	104			226	90	61	25	58				34		356
					120	80			100	0		50	20	357
					51	30	11	9		10		61		358
					26	19								359
					3	2					475			360
80					45	32							55	361
					53	53			14	0				362
					30	11	55	0	27	0		28		363
					161	99								364
					50	25	40	35				136		365
124					184	73	56	66					90	366
					25	6								367
0	0	0	0	0	42	17	0	0	15	0	0	0	0	368
					15	15	59	38				23		369
0	0	0	0	0	46	17	57	8	0	0	0	0	0	370
					140	100	5	2						371
														372
					123	82								373
0	0	0	0	0	15	6	7	49	28	0	0	58		374
					125	43								375
					14	11	1	33	48	18		54	10	376
0	0	0	0			26	9	74	65	10	0	120	57	377
					11	3			16	9		66	21	378
					31	21	6	11	8	0	91	77	12	379
					14	12			2	0		106	14	380
					24				172	165		37		381
					21	13								382
					45	32								383
					10	6	20	17	12	0		15		384
0	0	0	0	0	60	35	15	21	60	37		21	1	385
											35	93	6	386
					12	12	12	14	0	4	93	82		387
40	0	0	33	0	140	20	2	10	0	0	139			388
					63	50								389
					75	10	12	10	6	1		50		390
					30	14	24	30	73	20	87	75	12	391
									75	0		35	30	392
					30	12			7	8	25	29		393
							27	240			0			394
					16	10	1	7	0	0	0	43		395
30					80	58								396
							127	147	11	17		76		397
					89	45								398
					58	21	33	18	14	6		144	32	399
					7	3			10	0	50	12		400
					44	25	6	0				49	5	401
					25	12	8	15						402
					5				40	0		50	10	403
					158	51	35	133						404
					95	60	20	25	35	23	35	66	14	405
												57	28	406
					45	30			60	10	101	94	20	407

TABLE 30.—*Statistics of universities and*

	Name.	Number of students in undergraduate courses.						
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering.	Chemical engineering.	Mining engineering.
	1	2	3	4	5	6	7	8
	TEXAS—continued.							
408	St. Mary's University	46						
409	Southwestern University*	185						
410	Burleson College	140						
411	Wiley University	33						
412	Texas Christian University*	100						
413	Austin College	70						
414	Baylor University	271						
415	Paul Quinn College	45						
416	Trinity University	52						
	UTAH.							
417	Brigham Young College	60			0			
418	University of Utah	198						
	VERMONT.							
419	University of Vermont and State Agricultural College	115	44	14	47	44	35	
420	Middlebury College	134	0	0	0	0	0	0
421	Norwich University	3			100		10	
	VIRGINIA.							
422	Randolph Macon College	141						
423	Bridgewater College	14						
424	University of Virginia	306						
425	Emory and Henry College	72						
426	Fredericksburg College	35						
427	Hampden-Sidney College	72						
428	Washington and Lee University	175			40	17	20	12
429	Richmond College	208						
430	Virginia Union University	29						
431	Roanoke College	115						
432	College of William and Mary	195						
	WASHINGTON.							
433	Vashon College	5						
434	University of Washington	503		32	41	34	4	55
435	Gonzaga College	160						
436	University of Puget Sound*	37						
437	Whitworth College	52						
438	Whitman College	90						
	WEST VIRGINIA.							
439	Morris Harvey College	22						
440	Bethany College	196						
441	Davis and Elkins College	12						
442	West Virginia University	325	86	45	46			
	WISCONSIN.							
443	Lawrence University	219	0	0	0	0	0	0
444	Beloit College	242						
445	University of Wisconsin	1,301	72	104	136	162		
446	Milton College	32						
447	Concordia College	152						
448	Marquette College	107						
449	Mission House	34	0	0	0	0	0	0
450	Ripon College	83						
451	Northwestern University	52						
452	Carroll College	36						
	WYOMING.							
453	University of Wyoming	23	8	3				12

*Statistics of 1903–4.

colleges for men and for both sexes—Continued.

Number of students in undergraduate courses.					College students studying—		Number of students in pedagogy.		Number of students in business course.		Students in military drill.	Students in music.	Students in art.	
General engineering.	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Greek.	Men.	Women.	Men.	Women.				
9	10	11	12	13	14	15	16	17	18	19	20	21	22	
					20									408
					45	21	10	8	10	8		47		409
					33	33								410
					24	3			53	28	150	127	103	411
					70	20								412
					138	68	17	30				404	27	413
					28	5	0	10	12	4		16		414
					60	20			60	20		120	6	415
														416
					9		11	11	76	12		120	97	417
148					109	25	19	78					9	418
				22	72	16					163			419
0	0	0	0	0	112	20	14	14	0	0	0	0	0	420
					3	2					120			421
					73	35								422
					14	4	14	28	31	8		66		423
88					76	25	0	0	0	0	0	0	0	424
														425
														426
					50	19								427
					60	30								428
					120	37								429
					12	11								430
					115	41	4	0	20	0				431
					150	15	140	0						432
									10	4	88	40	18	433
					116	82	21	81						434
					180	135			145	0	135	95		435
					18	13			5	22		28	36	436
					51	19						65	8	437
					39	27			17	13		186		438
					22	1			20	2	25	57	15	439
					146	87	9	3	16	10		41	8	440
					12	1								441
					20	20	20	5	25	20	225	155	95	442
0	0	0	0	0	54	21	3	19	47	31		*108		443
					90	30	16	13	31	0		45		444
309				210	372	66	36	33			562	153		445
					32	5	1	1				80		446
					152	152								447
					107	107			53	0				448
0	0	0	0	0	34	34	0	0	13	0	0	44	0	449
					8	14	3	5				42	22	450
					52	52	8	0	30	8	74			451
					8	3	1	3				34	16	452
							0	46	22	18	150	31		453

* Includes art.

TABLE 31.—*Statistics of universities and*

	Name.	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library.		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	ALABAMA.									
1	Howard College	$60	$17	.....	$120	.....	.....	6,000	7,000	$10,000
2	Southern University	50	12	$100	125	0	0	8,000	.....	7,000
3	St. Bernard College	40	.....	160	160	.....	3	4,000	1,000	6,500
4	Spring Hill College	.....	40	a 300	.....	0	0	18,000	5,000	15,000
5	University of Alabama	(b)	24	100	150	7	.....	20,000	10,000	30,000
	ARIZONA.									
6	University of Arizona	(b)	8	200	250	.....	.....	10,000	13,000	18,915
	ARKANSAS.									
7	Henderson College	50	12	180	200	0	0	1,000	500	1,500
8	Ouachita College	50	4–14	100	120	0	0	8,000	1,000	10,000
9	Arkansas College	50	5–7	90	110	0	5	4,300	1,200	7,500
10	Arkansas Cumberland College	40	5	100	140	0	20	4,000	1,000	2,500
11	Hendrix College	60	8	120	135	.....	53	8,400	700	4,000
12	University of Arkansas	0	5	145	162	0	0	9,000	3,000	15,000
13	Philander Smith College	16	1	56	72	.....	.....	2,000	500	2,000
	CALIFORNIA.									
14	University of California	(b)	8	.....	225	11	91	133,779	.....	250,000
15	Pomona College	70	8	170	200	.....	.....	7,300	575	7,405
16	Occidental College	60	7	150	200	0	4	3,500	1,500	4,000
17	St. Vincent's College *	50	.....	250	.....	.....	2	4,000	.....	.....
18	University of Southern California	70	.....	90	125	.....	11	6,000	3,000	.....
19	California College	70	.....	190	230	0	.....	2,300	250	1,500
20	St. Mary's College	.....	.....	.....	a 325	.....	.....	4,865	1,354	7,000
21	Throop Polytechnic Institute	75	.....	250	400	0	11	2,500	1,500	2,200
22	St. Ignatius College	80	10	.....	.....	0	4	53,278	9,200	120,000
23	University of the Pacific	0	20	200	250	0	0	2,000	.....	2,800
24	Santa Clara College	60	.....	.....	.....	0	1	17,850	800	36,200
25	Leland Stanford Junior University	(b)	.....	250	350	0	1	84,000	20,000	.....
	COLORADO.									
26	University of Colorado	0	15	125	300	22	41	33,000	.....	* 40,000
27	Colorado College	35	8	122	175	.....	12	30,000	.....	30,000
28	College of the Sacred Heart	30	15	.....	200	.....	8	6,000	.....	7,000
29	University of Denver	30	5	150	250	.....	100	8,000	.....	10,000
	CONNECTICUT.									
30	Trinity College	100	30	220	400	2	57	49,000	.....	.....
31	Wesleyan University	75	33	100	175	.....	13	66,000	.....	60,000
32	Yale University	155	.....	200	400	39	656	390,000	.....	.....
	DELAWARE.									
33	State College for Colored Students	(b)	.....	.....	64	.....	.....	800	500	600
34	Delaware College	60	30	180	225	0	0	14,250	9,000	22,000
	DISTRICT OF COLUMBIA.									
35	Catholic University of America	100	.....	350	500	3	28	37,000	2,000	.....
36	Gallaudet College	.....	0	a 150	a 250	3	92	6,000	1,000	10,000
37	Georgetown University	150	2	425	500	.....	25	90,000	5,000	150,000
38	George Washington University	100–125	7	180	300	.....	22	13,700	2,500	16,709
39	Gonzaga College	40	.....	.....	.....	0	12	10,000	1,000	.....
40	Howard University	0	2	85	100	.....	.....	46,612	.....	100,000
41	St. John's College	100	5	.....	.....	.....	.....	5,500	1,000	.....

* Statistics of 1903–4.

a Including tuition.

colleges for men and for both sexes.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.		
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
$2,000	$75,000	.....	$8,000	0	[a] 0	0	0	$9,000	$17,000	$13,000	1
10,000	135,000	$40,000	3,420	$2,302	.....	.....	.....	13,904	19,627	.....	2
10,000	80,000	0	19,000	0	0	0	0	0	19,000	0	3
10,000	300,000	0	50,000	0	0	0	0	0	50,000	0	4
15,000	300,000	1,000,000	5,000	44,000	$5,000	.....	.....	.....	54,000	.....	5
42,472	172,549	.....	3,273	.....	25,198	.....	$25,000	1,480	54,951	.....	6
15,000	50,000	0	12,500	.....	.....	.....	.....	.....	12,500	.....	7
23,000	95,000	0	20,230	0	0	0	0	7,543	27,773	12,160	8
1,200	25,000	20,000	.....	.....	.....	.....	.....	.....	.....	.....	9
5,000	55,000	12,000	3,500	300	.....	.....	.....	250	4,050	1,980	10
4,500	80,000	46,100	5,980	2,760	.....	.....	.....	2,800	11,540	700	11
102,500	310,000	130,000	4,070	3,900	75,769	$49,468	33,182	.....	164,389	.....	12
2,500	45,000	.....	3,400	.....	.....	.....	.....	3,900	7,300	400	13
.....	3,807,608	4,280,435	45,153	201,140	331,306	193,707	40,000	18,077	829,473	303,377	14
34,637	125,000	185,000	28,959	11,098	.....	.....	.....	1,636	41,693	21,597	15
15,000	135,000	5,300	9,000	.....	.....	.....	.....	.....	9,000	52,000	16
800	137,000	.....	14,000	.....	.....	.....	.....	.....	14,000	.....	17
6,000	200,000	332,000	15,500	12,970	.....	.....	.....	2,500	30,970	7,000	18
3,000	40,000	36,000	1,700	2,100	.....	.....	.....	.....	3,800	4,500	19
4,000	300,000	0	65,748	0	0	0	0	0	65,748	0	20
24,000	105,000	72,000	33,500	2,475	0	0	0	750	36,725	55,500	21
125,000	800,000	.....	8,618	.....	.....	.....	.....	.....	8,618	15,630	22
3,500	176,500	109,000	13,000	5,000	.....	.....	.....	.....	18,000	.....	23
35,200	200,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
[b] 317,000	[b] 3,000,000	30,000,000	.....	.....	.....	.....	.....	.....	750,000	.....	25
[b] 50,000	[b] 350,000	0	20,000	.....	130,000	.....	.....	.....	150,000	3,000	26
50,000	900,000	400,000	.....	.....	.....	.....	.....	.....	.....	.....	27
3,000	200,000	.....	12,000	.....	.....	.....	.....	.....	12,000	.....	28
50,000	260,000	315,000	50,000	8,000	.....	.....	.....	.....	58,000	12,000	29
40,000	1,000,000	750,000	[b] 17,952	[b] 24,349	.....	.....	.....	.....	[b] 42,301	60,000	30
135,340	808,750	1,391,216	20,733	71,711	.....	.....	.....	11,646	104,090	68,367	31
.....	.....	7,317,347	467,333	377,315	.....	.....	.....	18,268	853,016	1,397,200	32
2,000	30,000	.....	.....	.....	.....	2,000	5,000	5,468	12,468	.....	33
75,700	140,000	83,000	1,200	4,980	.....	7,500	[b] 35,000	6,699	55,379	.....	34
116,721	758,731	1,025,471	7,286	18,843	0	0	0	8,225	34,354	267,232	35
10,000	730,000	0	4,716	.....	.....	.....	103,500	478	108,694	.....	36
25,000	3,500,000	.....	75,000	0	0	0	0	0	75,000	75,000	37
39,381	1,118,724	274,330	115,967	12,929	0	0	0	36,892	172,788	9,068	38
.....	250,000	0	4,600	0	0	0	0	.....	4,600	.....	39
.....	2,000,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
.....	150,000	.....	10,000	.....	.....	.....	.....	.....	10,000	.....	41

[a] Free to residents; $20 to nonresidents.

TABLE 31.—*Statistics of universities and*

	Name.	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library.		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	FLORIDA.									
42	John B. Stetson University*	$60	0	$157		0	3	13,000		$33,000
43	University of Florida	(a)	0	120	$150	0	45	4,000	55,000	
44	St. Leo College	50	0	100	150		1	6,000	2,000	2,500
45	Florida State College*	0	$10	105	150	0	45	4,000	850	5,500
46	Rollins College	50		126	150		12	2,000	1,000	2,000
	GEORGIA.									
47	University of Georgia	0	15	80	162	0	0	30,000		50,000
48	Atlanta Baptist College	12	0	80		0	0	2,500	500	3,000
49	Atlanta University	16	0	80	80	1	0	12,000	700	12,000
50	Morris Brown College	9	3		84			1,500	200	300
51	Bowdon College*	32	1	63	72	0	1	1,000	750	1,000
52	North Georgia Agricultural College	10		90	125			10,000		4,000
53	Mercer University	55	0	100	200	2		20,000	5,000	10,000
54	Emory College	60	4	90	150		6	30,000		
55	Clark University	12	6		76			1,000		1,200
56	Nannie Lou Warthen Institute	22	0	72	90	0	0	500	100	300
57	Young Harris College	15		83	100			800	800	1,000
	IDAHO.									
58	University of Idaho	0	2	200	200	0	2	5,142	3,800	7,500
	ILLINOIS.									
59	Hedding College	40		95	114		12	5,000	1,000	
60	Illinois Wesleyan University	40	10					7,000	1,000	
61	St. Viateur's College		5	$275	300			6,000		
62	Blackburn College	50	2	100	150	0	4	4,000		4,000
63	Carthage College	40	5	200	250	0	3	6,000	2,000	5,000
64	St. Ignatius College*	40	10				10	24,000	5,000	30,000
65	St. Stanislaus College	30			145			1,500	500	3,000
66	University of Chicago	120		173	225	80	240	418,836		441,147
67	James Millikin University	30	3	100	150	3	25	3,000		3,500
68	Evangelical Proseminary	50	0		100			2,015		1,000
69	Eureka College	45	5	130	200		2	7,000	1,000	
70	Northwestern University	90	0	256	330	8	7	98,238	66,228	
71	Ewing College	30	0	80	90			5,000	3,000	
72	Knox College	60		176	250			9,000		
73	Lombard College	55		140	250		14	7,000	3,000	7,000
74	Greenville College	48	6	125	150		13	5,000	500	5,000
75	Illinois College	50	5	125	175		14	16,000		
76	Lake Forest College	40	15	169	187		33	17,000	3,000	
77	McKendree College	36		81	170			8,000		
78	Lincoln College	10	20	123	138	0		4,000	500	
79	Monmouth College	30	18	130	150		8	6,000		4,000
80	Northwestern College	36	18	125	175	0	0	8,000	250	13,000
81	St. Bede College	50	0		150	0	0	8,000	1,200	
82	St. Francis Solanus College	30	15	140	160		4	7 373		15,000
83	Augustana College	36	6	114	138			20,500		
84	Shurtleff College	36	7	125	140		40	8,000		8,000
85	University of Illinois		34	200	350	0	515	80,999	29,860	135,000
86	Westfield College	30	5		150			3,000		1,500
87	Wheaton College	37		120	200			4,000		
	INDIANA.									
88	Indiana University	0	3	160	225 250			50,950		52,415
89	St. Joseph's College	50		130	150			7,200	800	7,500
90	Wabash College	50		150	200	1		40,000	10,000	30,000
91	Concordia College	40		72	100			10,000		

* Statistics of 1903–4.

a Free to residents; $20 to nonresidents.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.		
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
$35,000	$260,000	$195,000	$14,093	$15,004	.....	.....	.....	.....	$29,097	.....	42
55,000	153,475	153,800	11,193	7,710	$12,238	.....	$27,500	.....	58,641	.....	43
300	25,000	.....	8,000	.....	.....	.....	.....	$2,000	10,000	$2,000	44
3,000	40,000	65,000	3,000	4,500	55,000	.....	.....	.....	62,500	.....	45
16,000	100,000	200,000	5,195	8,000	.....	.....	.....	3,000	16,195	20,000	46
30,000	520,000	809,748	8,146	26,964	142,400	$32,500	35,000	1,475	236,485	22,466	47
5,000	70,000	21,000	991	840	0	0	0	7,772	9,603	455	48
10,000	260,000	53,000	3,330	2,075	0	0	0	300	5,725	39,000	49
2,500	75,000	.....	6,050	.....	.....	.....	.....	.....	6,050	.....	50
200	15,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
8,000	25,000	.....	1,000	.....	16,500	.....	.....	4,000	21,500	.....	52
5,000	300,000	250,000	15,000	8,000	.....	.....	.....	.....	23,000	500	53
4,000	200,000	222,115	12,356	10,790	.....	.....	.....	2,455	25,601	2,000	54
.....	500,000	.....	4,198	.....	.....	.....	.....	14,697	18,895	.....	55
400	10,000	0	2,600	0	700	0	0	.....	3,300	100	56
600	45,000	14,000	900	700	300	.....	.....	502	2,402	.....	57
47,820	232,750	212,871	.....	.....	21,500	30,928	40,000	867	93,295	445	58
2,000	60,000	65,000	.....	.....	.....	.....	.....	.....	.....	.....	59
.....	80,000	118,350	5,500	4,315	.....	.....	.....	10,828	20,643	.....	60
.....	100,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
10,000	40,000	30,000	1,500	1,700	.....	.....	.....	2,800	6,000	.....	62
5,000	80,000	50,577	6,466	3,289	.....	.....	.....	517	10,242	7,259	63
50,000	200,000	1,000	14,000	50	.....	.....	.....	.....	14,050	.....	64
2,500	100,000	0	7,000	.....	.....	.....	.....	.....	7,000	0	65
757,419	7,183,845	7,752,017	504,554	336,144	0	0	0	47,607	888,305	579,873	66
40,000	240,000	200,000	23,000	32,500	.....	.....	.....	.....	55,500	500	67
4,000	75,000	3,800	5,644	152	.....	.....	.....	14,339	20,135	3,202	68
.....	125,000	66,000	10,000	1,300	.....	.....	.....	1,000	12,300	35,000	69
447,168	3,118,760	4,130,694	[a]342,246	191,148	0	0	0	.....	533,394	243,019	70
500	50,000	18,000	.....	.....	.....	.....	.....	.....	.....	.....	71
30,165	219,252	272,212	14,782	13,892	.....	.....	.....	.....	28,674	25,000	72
12,000	125,000	200,000	.....	.....	.....	.....	.....	.....	20,000	.....	73
5,000	60,000	.....	6,125	.....	.....	.....	.....	.....	6,125	15,000	74
.....	243,894	228,720	6,903	8,450	.....	.....	.....	8,815	24,168	.....	75
30,000	700,000	600,000	7,000	25,000	.....	.....	.....	.....	32,000	.....	76
5,000	65,000	135,000	3,837	2,273	.....	.....	.....	.....	6,110	100,000	77
.....	105,000	100,000	1,533	6,462	.....	.....	.....	118	8,113	.....	78
.....	100,000	239,944	19,127	11,375	.....	.....	.....	1,977	32,479	9,455	79
10,500	100,000	310,000	9,166	13,575	0	0	0	9,204	31,944	30,000	80
.....	300,000	0	.....	0	0	0	0	0	0	400	81
50,000	175,000	.....	31,183	.....	.....	.....	.....	7,511	38,694	8,500	82
.....	243,025	58,502	27,500	.....	.....	.....	.....	21,000	.....	19,400	83
5,000	100,000	140,462	6,022	6,061	.....	.....	.....	1,266	13,941	4,150	84
460,000	1,400,000	823,710	205,996	33,000	250,000	276,200	40,000	60,854	866,050	.....	85
2,500	60,000	36,000	.....	.....	.....	.....	.....	.....	.....	24,000	86
11,200	179,000	71,583	9,480	3,872	0	0	0	1,135	14,487	13,302	87
62,516	351,900	.....	4,500	.....	190,000	100,000	.....	.....	294,500	.....	88
12,000	182,000	.....	7,700	.....	.....	.....	.....	5,000	12,700	.....	89
20,000	230,000	800,000	10,000	25,000	.....	.....	.....	.....	35,000	10,000	90
500	200,000	.....	13,000	.....	.....	.....	.....	.....	13,000	5,000	91

[b] Including tuition.

[c] Including dental school clinic sales, $22,858.

TABLE 31.—*Statistics of universities and*

	Name.	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library.		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	INDIANA—continued.									
93	Franklin College	$42		$150	$250			15,000	1,000	$10,000
93	De Pauw University	45	$3	200	275			27,000	8,000	
94	Hanover College	0	24	150	200		3	20,000	5,000	
95	Butler College	45		154	204			10,000		
96	Union Christian College	18	15	100	140			3,000	2,000	3,750
97	Moores Hill College	30	7	81	115		1	5,000	2,000	3,000
98	University of Notre Dame	100		300		0	6	60,000		
99	Earlham College	77	0	130	150		50	12,000	1,000	
100	St. Meinrad College	30	0		125	0	0	16,000		
101	Taylor University	36	3	72	100			5,000	1,000	2,000
	INDIAN TERRITORY.									
102	Indian University	20	9	108				2,500	500	2,000
103	Henry Kendall College	22		125	150	0	0	3,000	3,000	2,500
	IOWA.									
104	Coe College	40	8	117	130			5,175	1,800	7,850
105	Charles City College	38	8	90	125	0	12	1,500	200	4,000
106	Wartburg College	40	5	125	150		4	3,300		2,700
107	Amity College	24	3	100	150	0	0	250	200	300
108	Luther College	0	16		94			13,438		13,500
109	Des Moines College	42	3	200	250			5,000		5,000
110	Drake University	40	1-20	75	125			7,900	1,000	10,281
111	St. Joseph's College	40	5			0	2	2,000	250	1,000
112	Parsons College	32	9	150	200	0	10	1,050		3,000
113	Upper Iowa University	38	4	100	180		41	12,000	4,000	20,000
114	Iowa College	55	8	87	144			34,323		[b]10,000
115	Lenox College	30	9	160	200	0	0	4,022	2,050	6,000
116	Simpson College	32	7	100	125			4,116		1,800
117	University of Iowa	20		133	190	11	14	75,000		
118	Graceland College	33	3	100	180	0	0	2,400	600	5,016
119	Palmer College	30	6	118	150	0	0	1,000	250	500
120	German College	30	14	150	175			1,883	57	2,750
121	Iowa Wesleyan University	45	1-18	90	117			8,000	3,000	10,000
122	Cornell College	47		100	175	0	200	25,536	5,000	34,000
123	Penn College	40	3	125	250			6,500	1,500	4,000
124	Central University of Iowa	20	24	100	150			6,000		
125	Morningside College	48	2	120	200	0	1	5,000	1,000	5,000
126	Buena Vista College	37	3			0	2	4,755		2,000
127	Tabor College	30	15	117	162	4	34	13,301	8,054	20,000
128	Western College	36	3	160	200			3,500		4,700
	KANSAS.									
129	Midland College	40		105	120			8,000	2,000	7,000
130	St. Benedict's College	60			140		3	20,000	500	
131	Baker University	40	0	81	144			12,000	3,000	25,000
132	College of Emporia	30	3	150	200			7,000	1,000	7,000
133	Highland University	25	4	100	150		4	5,000		3,000
134	Campbell College	30	1	115	130	0	3	3,000		1,000
135	Kansas City University	36		100	150			2,000		
136	University of Kansas	[a]	[b]	160	260	11	5	48,500	32,000	90,000
137	Kansas Christian College	27	1	90	100			3,000	200	3,000
138	Bethany College	50		100	150	0	4	10,000	5,000	10,000
139	Ottawa University	40		175	225	0	0	6,000		
140	St. Mary's College	60	22	150	170	0	0	15,200	2,824	
141	Kansas Wesleyan University	35		120	200	0	0	5,500	500	10,000
142	Cooper College	36		100	150			3,000	3,000	5,000
143	Washburn College	50	2	175	250			12,000	2,000	12,000
144	Fairmount College	38	6	200	250		1	24,000	30,000	16,000
145	Friends University	40	1					3,000	1,000	
146	St. John's Lutheran College	33		60	100			1,000	1,500	600
147	Southwest Kansas College	38	3-9	125	170			4,100	1,000	1,800

* Statistics of 1903–4.

[a] $10 to residents; $20 to nonresidents.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.		
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
$9,000	$110,000	$312,000	$4,710	$11,527	....	....	....	....	$16,237	....	92
....	400,000	390,000	21,000	18,500	....	....	....	$12,500	52,000	$59,000	93
....	150,000	200,000	....	....	....	....	....	....	....	....	94
5,000	125,000	200,000	6,000	14,000	....	....	....	....	20,000	....	95
....	25,000	74,797	2,502	4,212	0	0	0	254	6,968	1,239	96
5,000	60,000	25,000	5,000	1,000	....	....	....	....	6,000	2,000	97
300,000	2,000,000	60,000	....	....	....	....	....	....	....	....	98
50,000	200,000	262,000	20,600	12,000	....	....	....	25,800	58,400	....	99
300	200,000	0	3,000	....	0	0	0	11,500	14,500	0	100
5,000	76,500	....	7,648	....	....	....	....	4,267	11,915	1,825	101
600	65,000	....	7,000	....	....	....	....	5,849	12,849	....	102
750	100,000	0	3,500	....	....	....	....	....	3,500	11,500	103
15,000	130,000	236,000	9,540	9,400	....	....	....	....	18,940	8,500	104
7,000	55,000	53,000	4,500	1,500	....	....	....	1,000	7,000	....	105
1,500	80,000	1,500	4,270	....	....	....	....	....	4,270	12,321	106
500	29,000	12,000	3,000	700	....	....	....	....	3,700	1,850	107
....	100,000	10,645	....	....	....	....	....	....	....	....	108
1,000	85,000	100,000	2,177	4,542	....	....	....	....	6,719	....	109
25,985	277,000	255,100	57,050	23,930	....	....	....	15,683	96,672	30,000	110
2,000	150,000	....	25,000	....	....	....	....	25,000	50,000	30,000	111
25,000	100,000	150,000	4,000	8,000	....	....	....	....	12,000	2,000	112
8,000	250,000	100,000	10,650	3,650	0	0	0	4,000	18,300	....	113
*6,000	*300,000	355,042	27,892	19,791	....	....	....	405	47,888	76,300	114
1,900	40,000	7,000	5,000	420	....	....	....	8,000	13,420	10,000	115
5,500	121,000	76,700	17,079	3,466	....	....	....	3,989	24,534	12,252	116
*207,750	1,250,000	235,120	50,000	12,000	$185,500	$245,500	0	0	493,000	....	117
1,116	23,155	0	489	0	0	0	0	1,207	1,696	16,441	118
1,500	50,000	51,540	620	2,000	....	....	....	....	2,620	200	119
2,892	20,000	29,900	1,743	2,000	....	....	....	1,326	5,069	187	120
7,000	138,000	60,000	8,900	5,000	....	....	....	8,500	22,400	2,000	121
36,000	256,672	490,385	30,503	16,877	0	0	0	0	47,480	114,274	122
4,200	52,000	108,000	10,352	4,000	....	....	....	500	14,852	12,500	123
....	60,000	75,000	....	....	....	....	....	....	....	....	124
9,000	200,000	17,350	17,153	....	....	....	....	10,212	27,365	1,000	125
5,775	33,000	51,613	4,232	2,397	....	....	....	237	6,866	3,105	126
25,000	88,507	88,698	7,251	4,810	0	0	0	0	12,061	6,000	127
5,000	68,000	5,000	5,831	....	....	....	....	2,200	8,031	3,800	128
2,000	75,000	35,000	3,000	2,000	....	....	....	6,000	11,000	10,000	129
2,500	97,000	0	....	....	....	....	....	....	....	5,000	130
25,000	100,000	50,000	28,000	3,000	....	....	....	9,000	40,000	....	131
11,000	99,000	1,700	2,300	....	....	....	....	....	2,300	10,000	132
1,000	30,000	40,000	1,200	2,400	....	....	....	....	3,600	....	133
5,000	85,000	0	11,515	0	0	0	0	....	11,515	18,000	134
2,000	50,000	....	1,800	....	....	....	....	9,000	10,800	....	135
255,000	800,000	151,000	22,000	6,650	170,000	50,500	....	....	249,150	....	136
450	15,000	5,000	1,200	300	0	0	0	0	1,500	0	137
6,000	175,000	31,000	60,000	3,000	3,000	....	....	6,700	72,700	....	138
8,000	107,900	125,000	6,234	5,612	....	....	....	....	11,846	....	139
....	130,000	0	25,620	0	0	0	0	....	25,620	....	140
2,000	60,000	....	5,200	....	....	....	....	2,300	7,500	....	141
500	35,000	33,000	3,300	1,300	....	....	....	1,100	5,900	11,000	142
54,750	328,500	90,000	29,289	5,525	....	....	....	4,835	39,649	51,789	143
4,000	104,000	58,173	6,140	2,141	....	....	....	3,620	11,901	13,249	144
2,500	200,000	60,000	6,000	2,500	....	....	....	1,500	10,000	1,500	145
....	35,000	....	700	....	....	....	....	3,500	4,200	....	146
6,621	70,000	21,899	10,617	533	....	....	....	4,029	15,179	9,899	147

* $5 to residents; $10 to nonresidents.

TABLE 31.—*Statistics of universities and*

	Name.	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library.		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	KENTUCKY.									
148	Union College	$40	$8		$92	0	0	2,000	500	
149	Berea College	21		$70	125			20,000		
150	Central University of Kentucky	50	18	115	240			21,000	8,000	$20,000
151	Georgetown College	45	10	180	230		30	14,000	3,000	
152	Liberty College	50			130			50		50
153	Agricultural and Mechanical College of Kentucky.	25	5	76	133	10		5,913	13,066	12,843
154	Kentucky University	30	1-5	135	185		10	17,642		25,000
155	Bethel College	50	7	114	114	0	3	6,000		
156	St. Mary's College	40	15		140			4,000	1,200	4,000
157	Kentucky Wesleyan College	30	20	150	250		100			
	LOUISIANA.									
158	Louisiana State University	(a)	5–25	121	121	0		24,000		28,536
159	Jefferson College		8	b 250		0	0	7,600	500	4,500
160	Centenary College of Louisiana	50	14	114		0	0	2,000	1,000	3,500
161	College of the Immaculate Conception	60						18,476	4,816	10,000
162	Leland University			90				3,000		
163	New Orleans University*		9	100	150	0	0	5,000		
164	Tulane University of Louisiana	85	15	180	296	1	246	25,000	5,000	20,000
	MAINE.									
165	Bowdoin College	75	0	200	350	1	100	82,000		110,000
166	Bates College	50	21-24	109	171		72	24,742		30,000
167	University of Maine	30	30	143	152	2	4	27,200	8,300	30,000
168	Colby College	60	30	225	300		70	42,200	20,000	30,000
	MARYLAND.									
169	St. John's College	75	46		172		83	9,000		9,000
170	Johns Hopkins University	150	5	175	200	22	90	123,000	100,000	203,000
171	Loyola College	50	13			0	19	40,000	5,000	20,000
172	Morgan College	36	1				4	3,000	500	1,500
173	Washington College	50	38	81		0	70	3,000		
174	Rock Hill College		40	b 200				8,000	4,000	15,000
175	St. Charles College							19,000		
176	Mount St. Mary's College*		20	b 300			2	27,000		70,000
177	New Windsor College	45		155	185			6,000		6,000
178	Western Maryland College	45		180				6,000		
	MASSACHUSETTS.									
179	Amherst College	110		190	250			80,000		
180	Boston College	60					75	45,000		
181	Boston University	125		250	350	2	110	30,000		
182	Harvard University	150	4	250	400	35	378	700,342	400,650	
183	American International College	40		95	120			2,500	1,000	3,500
184	Tufts College	100	25	125	200	2	87	52,685	35,021	50,000
185	Williams College	140		323	500	0	85	53,000	18,000	
186	Clark University*					32		30,000		100,000
187	Collegiate Department, Clark University.	50		175	200			35,000		
188	College of the Holy Cross*	60	22	185	235	0	8	20,509		20,000
	MICHIGAN.									
189	Adrian College	15		108				6,000	1,000	5,000
190	Albion College	90		95	133		12	17,000	5,000	30,000
191	Alma College	32	2	117	144	0	33	19,234		17,817
192	University of Michigan	(c)		133	190	7	8	194,898	20,000	350,000

*Statistics of 1903–4.

a Free to residents; $60 to nonresidents.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.		
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
$1,500	$50,000	$378,000									148
162,091	240,870	509,772	$6,570	$23,382					$29,922	$141,285	149
10,000	216,000	500,000	49,000	25,000				[illegible]	74,150	3,000	150
3,000	128,000	[a]230,000	8,662	13,380				5,000	27,042	12,419	151
	25,000		5,000						5,000		152
79,307	691,988	144,075	5,542	8,644	$37,627		$36,375	1,028	89,216		153
5,000	446,000	330,000	10,640	19,431	0	0	0	22,342	52,413	25,000	154
1,000	100,000	130,000	5,500	6,500	0	0	0	0	12,000	7,000	155
	90,000		15,000						15,000		156
	75,000	66,000	2,750	3,250				1,800	7,800	60,000	157
74,123	337,000	318,313	8,930	14,656	15,000	$23,700	28,150	21,379	111,724		158
5,500	90,000	0		0	0	0	0	0		0	159
2,000	100,000		5,000					3,000	8,000		160
30,000	500,000		14,500						14,500		161
	250,000	115,000									162
1,000	150,000		15,000					7,000	22,000		163
115,000	655,000	2,368,000	83,800	60,000					149,800	12,900	164
20,000	930,000	969,000	31,716	42,659	[b] 0	0	0	11,089	85,464	58,384	165
10,000	400,000	421,487	13,764	22,778					36,542	17,307	166
54,000	285,000	218,300	30,639	9,915	26,000		40,000		106,554	50,000	167
15,000	300,000	425,000	19,500	17,000					36,500	41,500	168
50,000	500,000	5,000	10,500		10,700	15,000		3,000	45,200		169
175,000	1,180,000	4,845,000	97,000	181,000	25,000				303,000	56,000	170
5,000	300,000		3,200		0	0	0	800	4,000	600	171
5,000	85,000	5,075	2,851	262					3,113	14,341	172
15,000	70,000	35,000	6,807	1,014	14,000	7,500	0		29,321		173
25,000	80,000		25,000						25,000		174
	150,000										175
5,000	100,000										176
5,000	99,000		3,000						3,000	3,500	177
	280,000										178
100,000	1,000,000	1,800,000	43,500	60,000					112,500	70,000	179
	75,000	0									180
3,858	840,000	2,079,507	79,339	11,780				69,656	160,781	5,193	181
1,500,000	7,000,000	18,030,026	700,681	775,364				143,830	1,625,875	2,330,428	182
	96,500	25,000	4,480	400					4,880	12,600	183
25,000	800,000	1,890,000	115,200	62,500				6,000	183,700	10,000	184
67,800	650,292	1,373,498	72,694	66,036				4,142	142,862	51,758	185
	429,500	2,877,082									186
		1,300,000	4,000	50,000					54,000		187
8,000	500,000	8,000	20,400	320					20,720		188
2,000	150,000	26,000	12,213	1,500				498	14,211	9,000	189
40,000	200,000	255,000	15,600	14,500				10,000	40,100		190
9,210	147,296	230,357	5,576	12,881				2,962	22,129	7,681	191
975,710	1,922,620	846,000	221,288	38,500	403,525			100,440	763,753	20,000	192

[a] Including tuition.

[c] $30 to residents; $40 to nonresidents.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total		
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
.....	$170,000	.....	$9,021	.....	.....	.....	.....	.....	$9,021	$2,060	193
$40,000	80,000	$251,963	2,386	$11,939	 0	 0	 0	$325	14,350	5,757	194
.....	170,000	258,381	2,725	13,523	.....	.....	.....	.....	16,248	9,057	195
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	196
58,000	250,000	120,000	15,000	6,000	.....	.....	.....	.....	21,000	52,000	197
25,000	350,000	.....	15,200	.....	.....	.....	.....	8,500	23,700	.....	198
500	150,000	0	1,100	.....	.....	.....	.....	4,900	6,000	200	199
225,000	1,730,000	1,367,639	126,072	54,300	$234,443	$224,655	$40,000	32,439	711,709	.....	203
55,000	200,000	250,000	18,190	15,000	.....	.....	.....	1,075	34,265	1,600	201
8,300	104,700	16,000	9,754	.....	.....	.....	.....	14,696	24,450	500	202
18,000	169,000	394,511	10,166	17,518	0	0	0	0	27,684	4,832	203
8,000	160,000	.....	5,000	.....	.....	.....	.....	16,000	21,000	25,000	204
5,000	110,000	10,000	8,000	500	.....	.....	.....	20,150	28,650	7,498	205
1,000	20,000	80,000	1,014	3,750	350	.....	.....	432	5,546	10,000	206
3,000	40,000	100,000	9,998	5,000	.....	.....	.....	.....	14,998	13,460	207
3,000	125,000	.....	15,978	.....	.....	.....	.....	6,734	22,712	.....	208
5,000	106,000	116,000	5,752	8,000	.....	.....	.....	2,100	15,852	.....	209
100,000	250,000	688,380	9,750	41,303	13,500	15,000	0	1,500	81,053	4,600	210
200	30,000	.....	1,800	.....	.....	.....	.....	1,000	2,800	.....	211
1,800	10,000	0	3,010	.....	.....	.....	.....	.....	3,910	.....	212
5,000	80,000	25,000	6,000	700	.....	.....	.....	1,400	8,100	16,900	213
1,500	70,000	20,000	.....	900	0	0	.....	.....	3,500	3,500	214
2,500	18,000	.....	4,000	.....	.....	.....	.....	1,000	5,000	.....	215
264,200	1,263,366	1,240,839	13,300	63,312	116,898	135,752	38,438	45,902	413,601	.....	216
5,000	150,000	200,000	3,500	6,000	.....	.....	.....	3,000	12,500	40,000	217
10,000	100,000	191,000	5,000	11,400	.....	.....	.....	.....	16,400	20,000	218
18,000	45,000	78,000	1,575	5,300	.....	.....	.....	.....	6,875	.....	219
1,000	35,000	14,000	3,500	500	.....	.....	.....	1,200	5,200	.....	220
5,000	130,000	400,000	7,000	18,000	.....	.....	.....	.....	25,000	22,000	221
8,100	106,000	143,000	10,402	7,476	.....	.....	.....	.....	17,878	1,944	222
31,350	332,300	350,471	1,500	19,250	.....	.....	.....	.....	20,750	53,527	223
5,500	650,000	0	46,300	.....	.....	.....	.....	.....	46,300	.....	224
30,000	975,000	95,000	42,927	8,614	0	0	0	0	51,541	9,116	225
100,000	2,000,000	4,030,000	37,000	250,000	.....	.....	.....	.....	287,000	50,000	226
15,000	270,000	200,000	9,005	11,000	.....	.....	.....	2,000	22,005	14,000	227
3,500	82,951	94,442	9,060	4,875	.....	.....	.....	.....	13,935	7,260	228
2,000	120,000	82,000	5,000	5,000	.....	.....	.....	2,000	12,000	7,000	229
50,000	300,000	500,000	2,000	15,000	44,610	5,000	.....	250	66,860	250	230
2,667	104,858	3,245	9,517	157	.....	.....	.....	589	10,263	7,063	231
3,916	137,000	5,000	.....	.....	.....	.....	.....	.....	.....	.....	232
10,000	150,000	0	25,000	0	0	0	0	0	25,000	.....	233
15,485	111,800	189,223	8,742	9,412	.....	.....	.....	1,093	19,247	4,681	234
2,000	90,000	75,000	5,240	3,800	.....	.....	.....	.....	9,040	8,242	235
5,000	70,000	50,000	2,614	1,000	.....	.....	.....	25,386	29,000	15,000	236
245,000	910,000	457,471	19,000	55,000	135,000	147,250	40,000	20,368	416,618	1,000	237
18,000	280,000	450,000	11,200	13,000	.....	.....	.....	5,000	29,200	144,000	238
10,000	150,000	44,000	28,657	2,131	.....	.....	.....	14,799	45,587	7,550	239
9,500	68,000	.....	4,800	.....	.....	.....	.....	2,112	7,002	5,261	240

TABLE 31.—*Statistics of universities and*

	Name.	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library.		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	NEVADA.									
241	Nevada State University	..	..	..	$144	..	..	7,852	3,200	$10,774
	NEW HAMPSHIRE.									
242	Dartmouth College	$100	$25	$175	275	1	200	100,000	20,000	150,000
243	St. Anselm's College	50	..	..	150	..	..	5,100	2,200	..
	NEW JERSEY.									
244	St. Peter's College	60	10	..	..	..	8	15,000	500	5,000
245	St. Benedict's College	60	..	..	..	..	..	9,000	..	..
246	Rutgers College	75	24-54	..	182	0	440	49,320	5,000	40,000
247	Princeton University	150	14	175	300	13	110	192,000	55,000	..
248	Seton Hall College*	..	..	a 380	..	..	1	40,000	2,000	..
	NEW MEXICO.									
249	University of New Mexico	(b)	7	180	225	..	..	5,000	2,000	4,000
	NEW YORK.									
250	Alfred University	40	5	100	200	0	100	17,568	9,980	22,500
251	St. Bonaventure's College	60	5	150	175	0	0	8,907	500	30,000
252	St. Stephen's College	45	..	..	180	..	2	18,380	..	20,000
253	Adelphi College	180	..	..	..	0	7	10,500	..	9,000
254	Polytechnic Institute of Brooklyn	200	0	100	266	0	17	11,000	0	15,000
255	St. Francis College	60	5	150	160	0	7	4,132	1,135	2,855
256	St. John's College	60	10	190	247	0	30	7,000	4,500	5,000
257	Canisius College	50	..	200	220	..	17	24,600	300	77,000
258	St. Lawrence University	50	10	160	..	..	40	25,000	10,000	..
259	Hamilton College	75	..	300	400	1	75	44,000	36,000	75,000
260	Hobart College	80	20	95	152	..	60	44,618	14,623	50,000
261	Colgate University	60	11	126	144	..	200	38,675	..	75,000
262	Cornell University	100	..	..	..	25	17	311,897	48,000	621,482
263	College of St. Francis Xavier	100	..	..	..	0	34	105,840	..	..
264	College of the City of New York	0	0	..	..	3	0	37,221	3,480	75,000
265	Columbia University	150	12	284	472	30	225	375,531	150,000	800,000
266	Manhattan College	100	..	200	250	0	11	10,898	3,486	18,766
267	New York University	100	25	180	224	5	75	81,709	..	117,634
268	St. John's College	100	30	..	300	0	46	36,900	..	80,000
269	Niagara University	110	..	100	110	0	4	18,000	2,000	30,000
270	University of Rochester	75	21	241	296	..	110	42,500	..	..
271	Union University*	75	24	175	300	..	75	35,400	..	38,500
272	Syracuse University	75	33	250	400	2	..	66,038	24,808	112,984
	NORTH CAROLINA.									
273	St. Mary's College	40	..	160	..	..	7	10,000	700	12,000
274	University of North Carolina	60	22	90	110	2	116	43,000	20,000	100,000
275	Biddle University	..	..	..	120	..	..	12,800	800	..
276	Davidson College	60	25	100	140	0	24	16,000	..	12,000
277	Trinity College	50	20	128	148	..	70	20,004	12,815	..
278	Elon College	50	5	70	100	..	..	2,500	200	3,500
279	Guilford College	60	..	80	120	0	2	5,000	..	10,000
280	Lenoir College	40	2	50	63	0	2	2,000	1,000	1,500
281	Catawba College	41	9	72	90	..	..	3,000	1,000	5,000
282	Shaw University*	12	4	..	63	0	0	2,300	..	2,300
283	Livingstone College	8	19	..	64	..	..	6,000	..	15,000
284	Wake Forest College	80	25	92	110	0	0	17,000	5,000	15,000
285	Weaverville College	25	2	53	72	0	0	1,300	..	1,500

* Statistics of 1903-4.

a Including tuition.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.		
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
$52,188	$210,059	$140,993	$1,900	$6,032	$25,000	$24,675	$40,000	$595	$98,203	$1,500	241
50,000	1,350,000	2,600,400	57,000	104,000	20,000	.....	.....	.....	181,000	110,000	242
.....	150,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	243
.....	100,000	.....	3,000	.....	.....	.....	.....	500	3,500	.....	244
.....	20,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	245
75,000	530,000	516,000	6,030	25,070	2,473	.....	40,000	117	73,690	14,191	246
.....	.....	2,380,000	101,257	132,318	0	0	0	0	233,575	214,606	247
10,000	500,000	.....	40,000	0	0	0	0	0	40,000	500	248
5,000	75,000	.....	500	.....	18,000	.....	.....	.....	18,500	.....	249
48,000	99,000	348,000	4,770	14,231	0	100	0	6,218	25,319	8,365	250
14,300	217,500	.....	10,000	.....	.....	.....	.....	.....	10,000	0	251
6,500	250,000	103,000	1,845	5,150	.....	.....	.....	18,858	25,850	.....	252
55,500	439,550	75,750	116,240	2,543	845	250	0	754	120,632	2,000	253
78,968	428,504	426,452	88,065	5,993	.....	.....	.....	1,551	95,554	12,217	254
1,200	202,500	0	21,069	0	174	0	0	20,200	41,483	315	255
1,000	620,000	0	15,000	0	0	0	0	.....	15,000	0	256
154,000	300,000	17,000	34,000	1,100	.....	.....	.....	11,154	46,254	.....	257
17,000	154,000	458,343	0,484	27,736	.....	.....	.....	.....	34,220	70,000	258
10,000	500,000	400,000	15,000	30,000	0	0	0	.....	45,000	.....	259
10,000	227,480	440,476	5,619	20,404	0	0	0	1,755	25,768	6,250	260
40,00	420,000	1,725,000	21,232	55,064	.....	.....	.....	11,60	84,456	29,978	261
941,592	3,170,086	7,678,246	142,459	420,777	25,000	40,100	38,500	120,547	788,483	245,371	262
22,300	730,000	.....	30,000	.....	.....	.....	.....	.....	30,000	7,200	263
.....	600,000	0	0	0	313,302	.....	0	0	313,302	0	264
.....	12,217,503	14,405,128	499,316	561,335	.....	.....	.....	81,193	1,141,844	1,180,400	265
44,770	804,446	0	27,542	0	0	0	0	12,458	39,700	0	266
121,367	2,962,907	1,092,410	208,510	77,734	.....	.....	.....	72,900	355,152	98,237	267
55,000	983,495	28,930	21,482	0	0	0	0	179,516	200,998	5,014	268
55,000	190,000	0	45,000	0	0	0	0	15,000	60,000	2,000	269
152,584	473,179	893,302	36,419	35,155	.....	.....	.....	19 262	80,836	66,003	270
32,000	500,000	551,492	51,978	27,187	100	0	0	0	79,265	.....	271
223,071	1,135,500	2,207,275	147,891	63,040	.....	.....	.....	52,102	263,933	122,623	272
1 200	200,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	273
73 000	425,000	145,000	38,000	7,500	45,000	53 000	.....	3,300	144,000	15,500	274
7,000	260 000	7,000	12,780	250	.....	.....	.....	.....	13,030	.....	275
25,000	180,000	100,000	18,325	5,660	.....	.....	.....	.....	23 985	11,000	276
61,512	245,145	640,339	16,022	37,063	.....	.....	.....	.....	53 105	87,000	277
8,000	60 000	30,000	4,888	1,530	.....	.....	.....	2,053	8,471	10,000	278
10,000	100,000	65,000	8,640	3,375	.....	.....	.....	21,850	33,765	5,000	279
.....	40,000	5,000	4,633	150	.....	.....	.....	350	5,133	3,000	280
500	20,000	15,000	.....	.....	.....	.....	.....	.....	8,000	5,000	281
2 500	135 350	32,000	4,683	280	.....	.....	.....	1 074	6 037	.....	282
400	125,000	5,000	731	300	.....	.....	.....	18,658	19,689	10,709	283
10,000	100,000	210,000	12,000	22,000	.....	.....	.....	.....	34,000	.....	284
1,500	28,000	.....	2,000	.....	.....	.....	.....	700	2,700	4,200	285

[b] Free to residents; $40 to nonresidents.

TABLE 31.—*Statistics of universities and*

	Name	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	NORTH DAKOTA.									
286	Fargo College	$32	$2	$150	$300	0	0	6,000	.....	$5,000
287	University of North Dakota	0	....	145	250	0	0	15,000	4,000	25,000
288	Red River Valley University	36	0	117	200	...	...	600	.....	1,200
	OHIO.									
289	Buchtel College	40	7	133	160	0	25	7,000	.....	6,000
290	Mount Union College	45	3	115	145	..	...	6,970	11,000	10,500
291	Ohio University	0	15	140	175	0	0	19,000	3,500	40,000
292	Baldwin University	36	.....	160	180	..	.	8 000	2,000	.....
293	German Wallace College	30	...	110	140	..	.	3,940	...	3,000
294	Cedarville College	22	4	..	130	0	3	1,000	200	800
295	St. Xavier College	60	10	...	..	.	0	27,000	...	.....
296	University of Cincinnati	75-100	5-15	250	350	5	17	100,000	73,500	100,000
297	St. Ignatius College	50	10	.	..	0	7	12,300	.	20,500
298	Western Reserve University	85	..	171	209	..	.	50,000	20,000	50,000
299	Capital University	40	..	150	175	0	38	5,000	1,000	20,000
300	Ohio State University	..	18	200	320	15	....	58,522	8,500	185,000
301	St. Mary's Institute	50	10	130	150	.	..	6,000	300	10,000
302	Defiance College	30	.	130	160	.	20	3,000	.....	4,000
303	Ohio Wesleyan University	37	..	125	250	1	14	45,000	.. ....	43,000
304	Findlay College*	32	6-12	126	200	..	...	1,000	1,000	3,000
305	Kenyon College	75	10	125	175	..	.	35,000	...	40,000
306	Denison University	40	30	110	140	.....	....	30,000	5,000	75,000
307	Hiram College	48	0	120	175	..	..	10 000	...	10,000
308	Lima College*	40	2	148	160	.	...	1,000	500	1,000
309	Marietta College	30	20	.	.	0	50	60,000	15,000	.. ....
310	Franklin College	40	5	140	160	0	0	.	.	.....
311	Muskingum College	45	..	150	175		2	3,000	...	3,750
312	Oberlin College	75	.	100	125	0	.	64,800	58,400	125,000
313	Miami University	0	15	150	250	..	..	21,549	...	50,000
314	Richmond College*	00	80	150	.	..	.	3 000	500	.....
315	Rio Grande College	28	0	80	100	0	0	3,250	1,000	3,000
316	Scio College	36	3	.	..	..	..	.	.	.....
317	Wittenberg College	50	3	185	210	..	..	12,000	2,000	20,000
318	Heidelberg University	26	25	150	200	.	.	15,000	.. ..	.....
319	Otterbein University	42	.....	125	200		1	11,500	4,500	10,000
320	West Lafayette College	36	.....	60	100	.	...	1,518	817	2,500
321	Wilmington College	40	.....	78	95	...	...	3,500	...	2,500
322	University of Wooster	45	15	90	150	...	74	25,000	10,000	15,000
323	Antioch College	37	.....	90	120	...	...	7,000	500	8,000
	OKLAHOMA.									
324	University of Oklahoma	0	0	150	225	0	0	7,000	5,000	15,000
	OREGON.									
325	Albany College	50	.....	150	200	0	0	2,650	.....	800
326	Dallas College	35	.....	95	132	..	...	1,800	500	2,000
327	University of Oregon	.....	15	150	200	..	....	10,000	1,000	.....
328	Pacific University	48	8	115	135	0	9	12,700	1,100	15,000
329	McMinnville College	30	6	120	175	...	33	4,400	...	6,200
330	Pacific College	.....	.....	.....	.....	...	...	.....	.....	.....
331	Philomath College	26	2	80	96	...	....	1,000	1,000	1,250
332	Willamette University	.....	.....	.....	.....	...	..	.....	.....	.....
	PENNSYLVANIA.									
333	Western University of Pennsylvania	100	20	152	190	1	37	15,000	5,000	.....
334	Muhlenberg College	75	10-25	120	203	..	39	10,000	2,000	5,000
335	Lebanon Valley College*	50	5	....	120	....	20	10,000	.....	.....
336	St. Vincent College	60	....	....	350	.....	1	40,500	.....	.....

* Statistics of 1903–4.

a Including tuition.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total		
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
$7,000	$100,000	$150,000	$7,000	$3,500					$15,500	$4,000	285
100,000	500,000	479,339		15,325	$62,796	$76,000	0		156,121	6,000	287
1,000	55,000	49,000	5,500	2,500				$1,500	9,500	25,000	288
18,000	175,000	185,000	5,855	11,038	0	0	0		16,893	35,000	289
105,000	168,000	116,777	16,048	5,800				2,442	24,291	3,250	290
75,000	750,000	111,272	8,470	5,564	98,729				112,763	0	291
6,000	250,000	77,000	11,000	4,500				500	16,000	1,500	292
5,000	94,000	144,960							16,585	3,400	293
500	25,000	40,000	1,300	2,200				500	4,000	10,000	294
7,000	100,000			0	0	0	0	0			295
96,500	665,000	1,445,788	56,711	48,963	66,305				171,979	21,000	296
11,000	190,000		9,000					10,000	19,000		297
15,000	100,000	75,000	4,500						13,500		298
40,000	1,500,000	1,800,000	60,000	90,000				10,000	160,000	50,000	299
425,000	2,700,000	695,838	43,034	36,769	293,582	$41,832	$25,000	37,393	477,610	102,025	300
12,000	600,000	0	30,000		0	0	0	1,000	31,000	0	301
1,500	60,000	45,000	4,000	2,500					6,500	2,000	302
31,300	848,389	944,426	28,085	40,282	0	0	0	14,742	83,109	40,713	303
500	102,113	53,937	5,039	2,584				786	8,389		304
30,000	435,000	560,000	12,500	21,746					34,246	12,500	305
50,000	400,000	750,000	34,000	28,000					62,000	125,000	306
8,000	125,000	175,000	9,134	8,688					18,022	1,474	307
2,000	50,000										308
	240,000	262,647	5,662	11,656	0	0	0	1,624	19,144	13,621	309
5,000	32,000	0	3,500	0	0	0	0	0	3,500	7,500	310
2,500	42,000	42,000	6,323	3,167				2,500	11,990	2,650	311
50,000	1,045,000	1,631,400	128,300	53,891	0	0	0	500	182,491	277,300	312
12,000	840,000	20,000	7,387	8,348	80,213	29,649		21,782	147,379		313
500	40,000		1,300						1,300		314
4,000	40,000	77,000	1,800	4,670					6,470	850	315
											316
12,000	130,000	410,000	12,000	14,000				2,000	28,000	90,000	317
10,000	125,000	250,000	4,200	7,500				6,500	18,200	40,000	318
4,000	82,500	108,500	10,302	5,132					15,434	27,695	319
2,100	24,000		1,450					1,700	3,150	3,000	320
5,000	100,000	40,000	6,000	2,000					8,000	10,000	321
	419,185	386,590	30,485	15,240					45,725	61,000	322
2,000	50,000	100,000	2,000	4,500					6,500	170	323
60,000	250,000			10,000	30,000	25,000			65,000		324
1,000	40,000	3,300	4,500	139				2,550	7,189	1,000	325
2,500	12,000	18,000	2,000	700					2,700	1,500	326
15,000	175,000	155,000	2,790	9,385	47,500				59,675		327
9,500	95,000	213,000	6,211	10,500	0	0	0	955	17,666	10,955	328
5,000	40,000	40,000	4,757	2,000					6,757	1,400	329
											330
500	15,000	4,200	1,500	300				100	1,900	2,500	331
											332
138,438	509,130	452,378	85,366	20,441	3,500				109,207	6,925	333
1,000	250,000	170,000	3,967	10,067				4,420	18,454	42,509	334
7,500	200,000	75,000								110,000	335
	150,000	0									336

TABLE 31.—*Statistics of universities and*

	Name.	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library.		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	PENNSYLVANIA—continued.									
337	Beaver College	$60		$150	$200			3,000		$2,000
338	Geneva College	45		108	125			4,000		
339	Moravian College	50	0	300		0		7,500		7,500
340	Dickinson College	0	$100	250	275			40,500		25,000
341	Pennsylvania Military College			a 550				2,000		2,000
342	Ursinus College	50	50	125	150		18	18,000	1,000	20,000
343	Lafayette College	100	0	206	258	0	198	30,142	3,200	34,072
344	Pennsylvania College	30		120	200		62	26,000		25,000
345	Grove City College	60		85	95			5,000		15,000
346	Haverford College	130		300	350	3	62	44,000		50,000
347	Juniata College	65	2	132	142			23,360	10,000	35,000
348	Franklin and Marshall College	0	65	120	140			37,000	5,000	35,000
349	Bucknell University	90		111	125		55	26,000		
350	Lincoln University	25	2	80			50	18,000		
351	Allegheny College	60		197	140		30	17,000		50,000
352	Allegheny College	38		132	154		3	6,000		8,000
353	Westminster College	50		140	170			6,000		
354	Central High School	0	0			0		50,000	500	32,000
355	Temple College	60					50	5,500		9,000
356	University of Pennsylvania	150–200	10–20	350	550	53	153	235,000	60,000	477,720
357	Holy Ghost College	60	0	200	250	0	8	3,000	500	4,000
358	Susquehanna University	60		150	200			7,000		
359	Lehigh University	(b) 150		200	450	0	5	123,000		
360	Pennsylvania State College	(b)	50		300	2	100	22,170		
361	Swarthmore College	150		200	300	2	66	24,000		50,000
362	Villanova College	50			200			16,000		
363	Ursinus College*	30	0		190	0	0	4,000	150	1,000
364	Washington and Jefferson College	60	30	140	250	0	6	18,000		30,000
365	Waynesburg College	30	6	140	100			7,000		5,000
	RHODE ISLAND.									
366	Brown University	106	45	300	400	16	109	140,000	50,000	80,000
	SOUTH CAROLINA.									
367	College of Charleston	40		90	100	6	73	15,564		15,000
368	Presbyterian College of South Carolina	40	5	84	100	0	0	2,000	2,000	1,500
369	Allen University	8		56				250	100	300
370	South Carolina College	40	26	150	200	0	77	35,000		100,000
371	Erskine College	30	5	72	90		3	15,000	700	
372	Furman University	50	15	76	115			5,000		10,000
373	Newberry College	40		70	90		12	10,000		
374	Claflin University	20		42	50	0	25	5,600	3,600	5,000
375	Wofford College	40	30	120	160		3	15,000		12,000
	SOUTH DAKOTA.									
376	Huron College	30	6	114	150			3,000		3,000
377	Dakota Wesleyan University	32		125	150	0	0	4,512		20,000
378	Redfield College	30	2	100	125		3	4,600	2,000	3,000
379	University of South Dakota	12		150	250			12,000		20,000
380	Yankton College	36			126	0	10	7,500	2,000	6,000
	TENNESSEE.									
381	Grant University*	30					50	8,000	1,000	
382	King College	60	5	100	120		1	5,000	2,000	2,000
383	Southwestern Presbyterian University	50	16	90	120		10	8,500	0	10,000
384	Hiwassee College	18–36	3	60	90			3,000	1,000	2,000
385	Southwestern Baptist University	50	10	150	175	0	0	1,000	500	600
386	Carson and Newman College	35	5	55	90		43	2,100	2,000	
387	Knoxville College	4		60	80	0	0	2,000	1,000	2,000

*Statistics of 1903–4. a Including tuition. b Free to residents; $100 to nonresidents.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total		
					Current expenses.	Building or other special pur-					
11	12	13	14	15	16	17	18	19	20	21	
$16,500	$94,870	$35,000	$15,680	$1,800				$12,442	$29,931	$17,689	337
2,500	175,000	137,000	5,390	6,500					11,890	10,000	338
2,000	100,000	120,000	1,225	5,880	0	0	0	0	7,105	5,000	339
14,000	475,000	360,000	60,000	14,000					74,000	130,000	340
	100,000	0									341
12,000	140,000	192,000	13,139	7,469				774	21,382	4,659	342
139,835	837,082	466,697	44,392	10,545				1,863	56,803	18,468	343
10,000	320,000	200,000	16,000	10,000					26,000	1,000	344
20,000	373,000	25,000									345
80,000	1,250,000	1,020,000	43,000	44,000				5,000	92,000	12,000	346
4,500	116,000	70,111	29,579	1,678					31,257	27,126	347
50,000	385,000	390,000	11,000	11,000					22,000	24,000	348
	300,000	700,000									349
5,000	200,000	177,000	2,488	8,850				2,500	13,838		350
50,000	362,000	430,000	19,000	21,000				1,500	41,500	52,000	351
5,000	90,000	125,000	13,985					4,500	18,485		352
10,000	100,000	140,000									353
150,000	1,587,050	0			$175,000		0	0	175,000		354
8,000	175,000	10,624	50,320						50,320		355
1,887,032	5,557,082	9,736,768	383,538	197,399	55,000	$30,000			665,937	833,597	356
1,000	150,000	0	12,000	0	0	0	0	0	12,000	0	357
1,900	128,750	34,550	16,000	1,800					17,800	10,375	358
10,000	1,250,000	1,064,637	67,379	66,337	0	0	0	0	133,716		359
60,000	1,342,500	517,000	15,964	31,020	52,000	73,402	$40,000	48,543	264,829		360
3,400	500,000	915,000	25,000	33,000				71,000	129,000	100,400	361
15,000	850,000										362
1,000	10,000		1,400					200	1,600		363
25,000	572,732	252,518	19,400	11,819					31,509	109,110	364
5,000	100,000	85,000	4,000	5,000					9,000	500	365
131,050	2,500,000	2,968,866	104,130	105,498				3,529	213,158	458,740	366
52,000	93,500	293,700	1,100	11,823	5,050				17,978	2,500	367
1,000	17,400		3,000					1,833	4,833	900	368
3,000	50,000	0	1,820					7,651	9,471		369
5,000	250,000		7,367		32,250	7,500			47,117		370
5,000	70,000	100,000	3,200	8,000					11,200		371
3,000	125,000	104,000							14,400	40,000	372
	90,000	35,000	3,674	1,630				3,893	9,208	1,810	373
10,000	200,000		7,000						7,000	10,000	374
6,000	187,200	83,753	14,742	6,402				4,270	25,510	1,625	375
1,500	60,800		6,700						6,700	25,535	376
5,000	185,000	42,000	24,000	4,000	0	0	0	0	28,000	10,000	377
1,000	35,000	18,000	3,000	1,000					4,000	10,000	378
130,000	250,000	(a)	8,000	7,500	60,000	25,000			100,500		379
5,000	140,180	139,233	7,995	6,394					14,389	27,382	380
2,000	403,945	30,500	16,100	1,107				7,069	24,276		381
500	17,500	16,000	1,000	1,100					2,700	900	382
1,500	40,000	200,000	2,000	13,000					15,000		383
500	15,000		1,400					200	1,600	400	384
2,000	100,000	75,000	7,000	2,500	0	0	0	0	9,500	80,000	385
10,000	93,000	85,000	12,000	3,000					15,000	36,000	386
2,000	125,000		1,000					6,000	7,000	14,000	387

a 85,000 acres of land.

TABLE 31.—*Statistics of universities and*

	Name.	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	TENNESSEE—continued.									
388	University of Tennessee	$60	$21	$140	$180	5	319	25,000	8,000	$13,866
389	Cumberland University	50	25	75	150	0	6	5,000		10,000
390	Bethel College	50	4	100	120			1,000		1,500
391	Maryville College	18		80	100			13,000	4,000	13,000
392	Christian Brothers College	72	10	225				7,500	1,500	16,500
393	Milligan College	36		100	117			3,000		2,000
394	Fisk University	10	2	92	92		16	8,000		10 500
395	Roger Williams University	12	5	72	72	0	0	4,321		6,000
396	Vanderbilt University	85	15–35	200	250	15	26	15,000		30,000
397	Walden University	12	1	46	76	0	0	7,300	1,600	1,700
398	University of the South	100	14	190	215	0	38	24,880	23,886	
399	Burritt College	40	10	60	80			3,850	2,000	3,000
400	Tennessee Military Institute	50			150	0	3	2,000	500	1,000
401	Greeneville and Tusculum College	27-36	3	72	90			8,400		2,600
402	Washington College	30	1	65	75		3	3,000	500	2,000
	TEXAS.									
403	St. Edward's College*	60			160					
404	University of Texas	0	15	150	200	25	103	46,000	16,000	105,000
405	Howard Payne College	50	10	100	125		15	2,000	600	000
406	Fort Worth University	48	2	125	165					
407	Polytechnic College	56	20	100	120		1	2,300		1,500
408	St. Mary's University	36						9,000	4,000	
409	Southwestern University									
410	Burleson College	50	3	125	150			250		
411	Wiley University	10	20	84	100			4,500	500	10,000
412	Texas Christian University*	50	0	125	125	0	0	3,350	100	2,500
413	Austin College	50	11	200	250			4,000	300	5,000
414	Baylor University	60		250	350	2	11	14,983	8,846	
415	Paul Quinn College	40	0	75				0	0	
416	Trinity University	50	10	175	200			5,000	4,000	3,000
	UTAH.									
417	Brigham Young College	11		96	143			4,500	1,500	4,208
418	University of Utah		15–30	175	200		2	23,500	12,000	30,000
	VERMONT.									
419	University of Vermont and State Agricultural College	60	33	250	350	0	60	70,954	32,156	101,000
420	Middlebury College	80	12	140	200	0	120	28,000	3,000	31,000
421	Norwich University	65		150	185			10,000	3,000	15 000
	VIRGINIA.									
422	Randolph Macon College	75	35	108	135		36	11,000		
423	Bridgewater College	48	1	75	120		1	5,000	2,000	10,000
424	University of Virginia	75	40	190	275	6	73	60,000		
425	Emory and Henry College	50	18	110	140		5	12,000	3,000	18,000
426	Fredericksburg College	55	5		135		2	1,000		1,000
427	Hampden-Sidney College	50	22	125	225		26	14,000	2,000	15,000
428	Washington and Lee University	50	30	100	150	1	65	45,000	15,000	50,000
429	Richmond College	70	20	110	160	0	50	15,000	2,500	20,000
430	Virginia Union University	12	8		72		5	11,000	1,000	10,000
431	Roanoke College	50	12	106	150		40	23,000	10,000	25,000
432	College of William and Mary	35	13	90	108		13	10,000		10,000
	WASHINGTON.									
433	Vashon College	80			227			500		200
434	University of Washington	0	0	175	275	0	4	18,909	10,000	50,000
435	Gonzaga College	50	12		200		1	6,650	2 300	13,159
436	University of Puget Sound*	45		100	250			2,500	1,000	1,500
437	Whitworth College	54		252	260			7,000	500	1,300
438	Whitman College	50	5	198	243	0	44	11,200	8,000	25,000

*Statistics of 1903–4.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations		Federal appropriations.	From other sources.	Total		
					Current expenses.	Building or other special purposes					
11	12	13	14	15	16	17	18	19	20	21	
$118,852	$493,331	$425,000	$13,522	$24,210	0	0	$40,000	$9,599	$87,331	$8,600	398
.....	250,000	150,000	8,000	6,000	.....	.....	.....	.....	14,000	.....	399
800	20,000	.....	3,500	.....	.....	.....	.....	.....	3,500	.....	400
10,000	112,000	307,364	11,935	12,830	.....	.....	.....	2,500	27,271	112,000	401
6,000	95,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	402
.....	10,500	.....	2,500	.....	.....	.....	.....	.....	2,500	.....	403
.....	350,000	50,200	8,500	2,382	$288	.....	.....	8,000	19,380	5,200	404
5,000	150,000	0	1,237	0	0	0	0	212	1,449	428	405
100,000	800,000	1,400,000	68,000	68,000	.....	.....	.....	.....	134,000	.....	406
900	135,000	42,000	19,300	2,000	0	0	0	16,000	37,300	8,000	407
.....	309,219	152,275	19,421	10,478	.....	.....	.....	70,000	99,799	33,051	408
1,000	2,500	0	5,600	.....	.....	.....	.....	.....	5,600	.....	409
500	95,000	0	3,000	0	0	0	0	0	3,000	0	410
7,750	49,400	2,158	5,216	72	.....	.....	.....	93	5,381	3,200	411
3,000	60,000	25,600	1,500	1,250	.....	.....	.....	.....	2,750	8,000	412
2,000	100,000	0	.....	.....	.....	.....	.....	.....	.....	.....	413
125,000	700,000	626,716	12,846	111,008	125,000	.....	.....	3,342	252,296	.....	414
2,500	45,000	.....	8,500	.....	.....	.....	.....	.....	8,500	500	415
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	416
800	100,000	.....	18,800	.....	.....	$18,000	.....	543	37,043	.....	417
400	60,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	418
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	419
.....	50,000	.....	5,600	.....	.....	.....	.....	.....	5,600	.....	420
500	70,000	.....	9,000	.....	.....	.....	.....	6,000	15,000	300	421
10,000	200,000	.....	25,000	.....	.....	.....	.....	5,000	30,000	.....	422
50,000	50,000	35,000	4,500	2,000	.....	.....	.....	.....	6,500	.....	423
25,000	400,000	115,000	50,000	2,583	.....	.....	.....	12,417	65,000	.....	424
150	100,000	.....	3,000	.....	.....	.....	.....	18,500	21,500	600	425
5,000	81,468	73,000	.....	.....	.....	.....	.....	.....	31,762	500	426
15,261	102,475	100,000	6,418	4,395	.....	.....	.....	21,757	32,570	960	427
90,000	425,300	60,000	14,800	2,400	54,000	45,000	.....	26,350	142,550	.....	428
66,020	832,000	657,550	18,166	35,035	6,000	.....	40,000	3,627	102,828	.....	429
22,500	200,000	410,000	3,000	20,000	.....	2,400	.....	.....	26,000	1,100	430
27,000	145,000	5,000	6,811	557	10,000	3,000	.....	.....	20,368	100,000	431
17,030	96,700	201,428	9,585	17,191	.....	.....	.....	.....	26,776	20,000	432
300	45,000	5,000	7,000	150	.....	.....	.....	.....	7,150	7,000	433
100,000	1,500,000	378,000	58,000	22,400	40,000	31,000	.....	3,000	164,000	725,000	434
2,500	100,000	25,000	9,201	3,472	.....	.....	.....	941	13,614	675	435
.....	15,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	436
5,000	130,000	140,000	1,987	9,509	.....	.....	.....	.....	11,796	2,000	437
75,000	454,000	864,457	10,546	48,000	.....	.....	.....	.....	58,546	51,000	438
10,000	500,000	355,000	13,000	20,000	.....	.....	.....	.....	33,000	12,000	439
2,000	250,000	90,000	2,000	3,500	.....	.....	.....	.....	5,500	21,000	440
6,000	100,000	71,000	.....	.....	.....	.....	.....	.....	.....	.....	441
3,000	150,000	134,000	1,500	5,500	25,000	.....	.....	.....	32,000	10,000	442
500	55,000	0	18,500	0	0	0	0	0	18,500	0	443
100,000	600,000	.....	2,280	.....	300,000	.....	.....	.....	302,280	.....	444
12,200	250,000	30,000	35,000	.....	.....	.....	.....	.....	35,000	15,000	445
2,500	35,000	.....	4,500	.....	.....	.....	.....	28,500	33,000	.....	446
.....	155,000	.....	7,500	.....	.....	.....	.....	1,800	9,300	16,700	447
27,350	198,495	228,153	13,920	19,615	0	0	0	43,734	77,269	1,285	448

TABLE 31.—*Statistics of universities and*

	Name.	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library.		
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
	WEST VIRGINIA.									
439	Morris Harvey College	$33	0	$90	$108	0	0	2,000	1,000	$2,000
440	Bethany College	36	$12	105	120		34	7,000	1,200	6,000
441	Davis and Elkins College	50	3		160					
442	West Virginia University	37	3	150	200	0	0	20,500	600	40,000
	WISCONSIN.									
443	Lawrence University	0	34	90	126	0	2	22,000		35,000
444	Beloit College	36	20	116	280			33,400	12,500	35,000
445	University of Wisconsin	(a)	23	200	300	20	14	100,356	30,000	188,141
446	Milton College	30	6	90	150		10	7,425	2,000	10,000
447	Concordia College	0	0	68		0	0	4,100	400	2,500
448	Marquette College	60	10	114	133	0	5	10,400	1,550	4,750
449	Mission House	20	10		100	0	0	7,000		
450	Ripon College	39		150	250			13,380		16,000
451	Northwestern University	30	5	75	100			6,815	500	10,000
452	Carroll College		3	100	140			2,000	600	2,000
	WYOMING.									
453	University of Wyoming	0	2	200	250	0	0	18,623	10,000	27,857

a Free to residents; $30–$40 to nonresidents.

colleges for men and for both sexes—Continued.

Value of scientific apparatus, machinery, and furniture.	Value of grounds and buildings.	Productive funds.	Income.							Benefactions.	
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total		
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
$1,000	$50,000	0	$3,460	0	0	0	0	0	$3,460	$6,000	439
2,500	200,000	$160,000	12,000	$7,000	.....	.....	.....	$1,800	20,800	47,000	440
1,600	60,000	.....	2,434	.....	.....	.....	.....	2,362	4,796	61,606	441
73,500	685,000	115,700	16,133	6,037	$93,900	$31,587	$35,000	4,544	188,101	600	442
25,000	225,000	315,000	13,500	10,300	0	0	0	17,300	47,100	120,000	443
72,000	462,000	907,482	13,010	48,004	.....	.....	.....	3,381	64,395	105,000	444
584,117	1,749,507	531,023	121,327	48,803	378,000	127,500	40,000	81,387	797,017	13,984	445
5,000	40,000	108,000	3,000	6,000	.....	.....	.....	.....	9,000	2,000	446
1,600	100,000	1,500	0	75	0	0	0	0	75	1,250	447
3,900	130,000	4,800	10,604	166	.....	.....	.....	.....	10,773	1,000	448
1,200	50,000	24,000	3,250	325	0	0	0	.....	3,575	15,500	449
.....	150,000	212,000	6,950	13,060	.....	.....	.....	14,000	34,010	6,200	450
10,000	120,000	.....	1,049	.....	.....	.....	.....	13,492	14,541	25,000	451
1,200	125,000	125,000	5,000	6,000	0	0	0	7,000	18,000	3,500	452
110,642	220,000	25,515	700	4,406	14,370	.....	40,000	.....	59,476	400	453

	PENNSYLVANIA.																						
14	Bryn Mawr	Bryn Mawr College	Nonsect...	1885	0	0	30	16	30	16	0	378	63	441	378	137	36	35	....	....	....
	VIRGINIA.																						
15	Lynchburg	Randolph-Macon Woman's College.	M. E. So..	1893	0	0	11	18	11	18	0	317	2	319	317	115	11	12	....	105	22

TABLE 32.—*Statistics of colleges for women, Division A.*

	Location.	Name.	Religious or nonsectarian control.	Year of first opening	Professors and instructors.						Students.										
					Preparatory department.		Collegiate department.		Total number.						College students in—			Students in—			
					Men.	Women.	Men.	Women.	Men.	Women.	Preparatory.	Collegiate.	Graduate	Total number.	Liberal arts.	Latin.	Greek.	Pedagogy.	Business course.	Music.	Art.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	CALIFORNIA.																				
1	Mills College	Mills College	Nonsect.	1871	5	26	5	26	5	26	134	41	0	214	41	39	2	....	....	95	40
	DISTRICT OF COLUMBIA.																				
2	Washington	Trinity College	R. C.	1900	0	0	7	18	7	18	.....	83	....	83	83	42	10	40	....	10	6
	ILLINOIS.																				
3	Rockford	Rockford College	Nonsect.	1849	1	13	1	16	3	19	37	75	..	143	75	21	9	....	....	75	5
	LOUISIANA.																				
4	New Orleans	H. Sophie Newcomb Memorial College.	Nonsect.	1887	0	11	8	16	8	25	131	182	....	390	182	53	12	....	....	..	....
	MARYLAND.																				
5	Baltimore	Woman's College of Baltimore	M. E.	1888	0	0	10	14	10	14	0	325	....	325	325	105	18	....	....	....	....
	MASSACHUSETTS.																				
6	Cambridge	Radcliffe College	Nonsect.	1879	0	0	94	0	94	0	0	360	56	416	360	89	46	60	....	57	45
7	Northampton	Smith College	Nonsect.	1875	0	0	22	60	22	60	0	1,049	6	1,067	1,049	..	..	..	..	9	3
8	South Hadley	Mount Holyoke College	Nonsect.	1837	0	0	7	69	7	69	0	671	3	674	671	234	64	94	..	80	171
9	Wellesley	Wellesley College	Nonsect.	1875	0	0	12	82	12	82	0	1,035	15	1,050	1,035	177	105	97	..	69	87
	NEW YORK.																				
10	Aurora	Wells College	Nonsect.	1868	0	0	4	19	4	19	0	139	..	139	139	78	3	..	....	....	....
11	Elmira	Elmira College	Presb.	1855	0	0	7	11	7	11	0	148	6	229	148	134	15	19	..	75	6
12	New York	Barnard College	Nonsect.	1889	0	0	42	11	42	11	0	366	..	366	366	157	49	90	0	24	0
13	Poughkeepsie	Vassar College	Nonsect.	1865	0	0	15	73	15	73	0	976	9	985	976	552	123	..	....	67	....

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TABLE 33.—*Statistics of colleges for women, Division A*—Continued.

	Name	Annual expenses in college department.		Annual living expenses.		Number of fellowships.	Number of scholarships	Library.			Value of scientific apparatus and furniture.	Value of grounds and buildings.	Productive funds.	Income.				Benefactions.
		Tuition fees.	Other fees.	Lowest.	Moderate.			Volumes.	Pamphlets.	Value				Tuition and other fees.	From productive funds.	From other sources.	Total.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	CALIFORNIA.																	
1	Mills College	....	....	$500	....	0	18	7,000	....	....	....	$300,000	$250,000	....	....	....	....	....
	DISTRICT OF COLUMBIA.																	
2	Trinity College	$100	....	300	$350	0	9	10,000	5,000	$25,000	$20,000	....	....	$30,391	....	....	$30,391	....
	ILLINOIS.																	
3	Rockford College	75	....	....	275	0	5	6,500	..	15,000	25,000	150,000	106,311	31,944	$6,573	$1,217	39,734	$1,245
	LOUISIANA.																	
4	H. Sophie Newcomb Memorial College	100	....	225	....	.	.	7,500	....	15,000	47,380	275,992	732,881	25,387	28,907	....	54,294	....
	MARYLAND.																	
5	Woman's College of Baltimore	125	....	....	275	2		*9,000	*2,000	*10,000	*23,000	*678,000	*350,319	35,700	29,433	....	65,133	30,000
	MASSACHUSETTS.																	
6	Radcliffe College	200	....	300	400	0	18	20,000	1,200	24,000	9,000	400,000	.	71,800	....	0	....	117,500
7	Smith College	100	..	.	300	2	115	9 079	.	28,272	134,120	1,081 386	1,261,444	110,419	89,372	30,180	235,977	18,225
8	Mount Holyoke College	125	..	175	300	4	80	20,000	4 000		40,000	860,000	801,000	168,000	19,000	. .... .	187,000	276,000
9	Wellesley College	175	..	275	275	1	76	57,720	1,200	141,000	240,800	1,550,325	806,170	355,475	34,824	.. ....	390,299	22,070
	NEW YORK.																	
10	Wells College	100	....	....	300	.		13,054	. .	30,000	18,135	257,230	263,981	62,214	11,773	100	74,147	72,099
11	Elmira College	125	....	....	275	..	25	6,380	400	6,899	40,696	116,650	73,478	28,447	3,500	.....	31,947	1,923
12	Barnard College	150	$5	....	..	0	40	3,065	200	.	30,700	1,600,000	667,676	57,047	28,365	0	85,412	31,636
13	Vassar College	100	....	....	300	3	7	56,000	....	78,485	121,728	2,080,305	1,334,504	352,509	64,246	29,980	446,735	100,120

	PENNSYLVANIA.																	
14	Bryn Mawr College.	200	....	300	325	14	73	45,000	8,000	92,000	60,000	1,491,000	1,200,000	79,000	02,000	95,000	[illegible]	13,661
	VIRGINIA.																	
15	Randolph-Macon Woman's College.	75	15	.....	160	..	12	4,500	500	6,517	40,767	176,318	109,000	35,930	5,112	48,410	[illegible]	1,540

* Statistics of 1903-4

* Including tuition.

TABLE 34.—*Statistics of colleges for women, Division B.*

	Location.	Name.	Religious or nonsectarian control.	Year of first opening.	Professors and instructors.		Students.						College students pursuing courses leading to—					College students studying—		Number in—		
					Men.	Women.	Elementary.	Secondary.	Collegiate.	Graduate.	Total number.	Graduated in 1905.	A. B. degree.	Ph. B. degree.	M. E., Lit. or B. L. degree.	B. S. degree.	Other first degree.	Latin.	Greek.	Pedagogy.	Music.	Art.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	ALABAMA.																					
1	Anniston	Anniston College for Young Ladies	Nonsect	1896	3	15	...	109	132	..	241	7	...	...	...	...	...	...	...	...	189	32
2	Athens	Athens Female College	M. E. So.	1843	1	12	33	18	75	0	123	3	12	...	..	25	36	54	0	0	39	11
3	Marion	Judson College	Bapt	1839	4	26	..		300	3	303	32	50	...	75	60	..	160	.	15	195	42
4	....do	Marion Female Seminary *	Nonsect	1536	3	7	20	13	40	...	73	9	...	...	...	...	..	13	..	...	36	14
5	Talladega	Alabama Synodical College for Women.	Presb	1903	2	9	24	14	53	..	95	8	13	..	20	20	..	39	0	0	41	7
6	Tuscaloosa	Tuscaloosa Female College	Nonsect	1860	3	8	20	20	80	6	126	13	...	...	...	...	...	60	3	...	6	10
7	Tuskegee	Alabama Conference Female College	M. E So.	1856	3	10	14	20	128	...	162	24	0	0	24	...	.	57	3	12	80	10
	ARKANSAS.																					
8	Conway	Central Baptist College	Bapt	1892	1	9	30	30	70	0	130	5	50	.	20	.	. .	50	0	12	70	10
	CALIFORNIA.																					
9	San José	College of Notre Dame	R. C	1851	0	27	6	31	67		104	6	14	..	2	2	. .	66	14	23	94	16
	GEORGIA.																					
10	Athens	Lucy Cobb Institute	Nonsect	1858	0	18	20	50	150	..	225	22	...	...	...	...	...	...	...	..	...	...
11	College Park	Cox College	Nonsect	1843	7	20	.	..	245	5	250	17	245	...	...	...		...	.	...	198	15
12	Cuthbert	Andrew Female College	M. E. So.	1854	4	7	.	..	130		130	13	.	...	...	...	...	..	.	..	..	..
13	Forsyth	Monroe Female College	Bapt	1849	5	25	25	75	350	1	451	36	250	...	...	50	50	250	3	30	240	18
14	Gainesville	Brenau College	Nonsect	1878	6	19	25	25	223	...	273	20	90	.	110	10	.	90	....	40	160	15
15	La Grange	La Grange Female College	M. E. So.	1833	5	11	0	42	129	0	171	10	72	0	0	8	39	72	7	17	110	20
16	....do	Southern Female College	Bapt	1843	3	10	.	37	60	3	100	8	...	...	...	...	...	...	...	10	60	10
17	Macon	Wesleyan Female College	M. E. So.	1839	7	23	0	33	420	....	464	34	147	....	19	..	....	99	4	0	340	35
18	Rome	Shorter College	Bapt	1877	6	20	25	42	177	....	244	10	...	...	...	...	...	...	...	...	168	27

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TABLE 34.—*Statistics of colleges for women, Division B*—Continued.

	Location.	Name.	Religious or nonsectarian control.	Year of first opening.	Professors and instructors.		Students.															
					Men.	Women.	Elementary.	Secondary.	Collegiate.	Graduate.	Total number.	Graduated in 1905.	College students pursuing courses leading to—					College students studying—		Number in—		
													A. B. degree.	Ph. B. degree.	M. E. L. or B. L. degree.	B. S. degree.	Other first degrees	Latin.	Greek.	Pedagogy.	Music.	Art.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	MISSISSIPPI—cont'd.																					
46	Meridian	Meridian Female College	Nonsect	1903	3	32	30	50	350	0	430	17	12	5	50	25	..	100	15	40	400	8
47	Natchez	Stanton College for Young Ladies *	Nonsect	1904	1	15	47	36	66		183	14	28	0	0	0	0	28	16	0	70	17
48	Pontotoc	Chickasaw Female College	Presb	1852	0	4	25	..	60	..	85	6	40	....	20	...	...	40	....	...	20	....
49	Port Gibson	Port Gibson Female College	M. E. So	1843	.	7	8	13	34	....	55	8	...	..	...	..	....	21	. .	11	28	6
	MISSOURI.																					
50	Columbia	Stephens College	Bapt	1856	6	12	..	60	100		160	16	..	....	..	..	....	....	....	..	100	20
51	Fayette	Howard-Payne College	M E So	1844	2	12	..	54	73	3	178	20	....	....	....	....	....	....	0	0	105	17
52	Fulton	Synodical Female College	Presb	1872	2	10	11	50	39	0	100	4	..	..	..	..	..	89	0	...	50	10
53	Lexington	Central Female College	M E. So	1869	4	13	9	34	105	2	150	8	37	0	13	10	1	46	0	0	103	38
54	.. do.	Lexington College for Young Women	Bapt	1855	5	10	20	30	85		135	6	4	..	1	..	1	30	0	..	105	25
55	Liberty	Liberty Ladies College	Nonsect	1890	3	12	.	128	30	.	158	7	2	....	20	...	.	30	2	0	130	23
56	Mexico	Hardin College *	Bapt	1873	10	11	10	50	60	6	229	21	....	....	....	....	....	50	9	..	150	55
57	Nevada	Cottey College for Young Ladies	Nonsect	1884	2	15	27	91	52	5	271	9	...	0	...	...	...	50	0	0	160	24
58	St Charles	Lindenwood College for Women	Presb	1830	4	10	..	16	2	...	100	22	1	..	1	.	.	2	2	0	72	12
	NEW YORK.																					
59	Brooklyn	Packer Collegiate Institute	Nonsect	1854	5	42	39	418	108	0	565	38	0	0	0	0	0	108	12	0	0	0
60	New Rochelle	College of Saint Angela	R. C	1908	4	20	44	98	12	0	154	8	12	0	0	0	0	40	0	26	88	22
	NORTH CAROLINA.																					
61	Charlotte	Elizabeth College	Nonsect	1897	6	17	9	10	151	1	171	5	120	...	....	..	..	90	0	...	110	16
62	Dallas	Gaston College	Luth	1879	3	4	12	50	42	.	113	2	21	0	0	0	0	19	3	0	35	0
63	Greensboro	Greensboro Female College	M E So	1846	2	8	.	8	140	..	148	5	..	....	....	..	..	40	0	...	92	30
64	Hickory	Claremont Female College	Nonsect	1880	3	9	0	15	85	1	101	17	11	....	20	5	19	40	7	16	40	20

65	Louisburg	Louisburg Female College	M. E. So.	1857	1	12	30	30	83	-	143	7	20					36			60	15
66	Murfreesboro	Chowan Baptist Female Institute*	Bapt.	1848	2	9	31	15	70	1	11	9	-					62	0		76	12
67	Oxford	Oxford Female Seminary	Bapt.	1850		9		50	70		120		20	35				60		0	75	
68	Raleigh	Baptist Female University	Bapt.	1899	5	20		271	78	1	350	11	78									
69	Salem	Salem Female Academy and College	Moravian.	1802	5	35		100	172		373	60	172					172			327	50
	OHIO.																					
70	Oxford	Oxford College	Nonsect.	1849	3	18	0	20	54	0	103	14	3	0	25	6		9	3	0	50	25
71	do	Western College	Presb.	1855		24		15	120		195	17	120					45	14	0	45	3
72	Painesville	Lake Erie College and Seminary	Nonsect.	1859	3	23		31	67		157	6	67					11	6	4	27	3
	PENNSYLVANIA.																					
73	Allentown	Allentown College for Women	Reformed.	1867		7	10	12	44	0	70	9	0	0	0			44	0	0	80	23
74	Bethlehem	Moravian Seminary and College for Women	Moravian.	1749	5	13					100	13	0	0	0	0	0	75	0	0	80	8
75	Blairsville	Blairsville College	Presb.	851	2	12		80	40		120		30	10				40	20		50	12
76	Chambersburg	Wilson College	Presb.	870	6	27		78	177		354	20									80	
77	Mechanicsburg	Irving College	Luth.	1856		9		15	128		143	15	12		24	24		50	14		140	17
78	Pittsburg	Pennsylvania College for Women	Presb.	1869	4	20		138	31		261		31					180	15		56	61
	SOUTH CAROLINA.																					
79	Columbia	College for Women		1890	5	18	32	30	158		220	19	65					65		14	113	21
80	do	Columbia Female College	M. E. So.	1859	3	11	0	30	140	0	179	19	50	0	0	56		50	3	0	103	23
81	Due West	Due West Female College	A. R. Presb.	1859	5	11			126		126	12	73					67		20	70	19
82	Greenville	Greenville College for Women	Nonsect.	1894	2	6	10	18	65	5	98	5	60					25	0	30	40	
83	do	Greenville Female College	Bapt.	1854		16	18	16	220	0	260	28	28	0	47	0	30	94	0	30	112	40
84	Greenwood	Lander College	M. E. So.	1873	4	9	0	17	154	0	178	6	154	0	0	0	0	154	0	0	99	39
85	Spartanburg	Converse College	Nonsect.	1890	8	14		26	283	2	311	33						107			203	31
86	Union	Clifford Seminary	Presb.	1881		4	12	11	25		48	0	25					25	0	12	82	3
	TENNESSEE.																					
87	Bristol	Sullins College	M. E. So.	1870	5	15	30	22	170		222	17	42			68		84			98	45
88	Franklin	Tennessee Female College	Nonsect.	1856	2	9	40	20	100	2	162	11	15					50	30		90	28
89	Gallatin	Howard Female College	Nonsect.	1837			20	25	58	0	103	7	15		20			40	0	0	70	0
90	Jackson	Memphis Conference Female Institute	M. E. So.	1843		17	18	30	201	3	252	37	24	13	128	8		63	3	8	186	38
91	Murfreesboro	Soule Female College*	M. E. So.	1852		12					284	26									70	
92	Nashville	Boscobel College	Nonsect.	1890		14					126	12									50	8
93	do	Ward Seminary	Nonsect.	1865	6	24	24	50	175		400	42						100	6	0	200	35
	TEXAS.																					
94	Belton	Baylor Female College	Bapt.	1845	3	15	0	200	175		416	20	40		75	60		125	70	0	252	58
95	Bonham	Carlton College	Christian.	1867	2	10	21	14	40		75	5			15	28		10			80	5
96	Chappell Hill	Chappell Hill Female College	M. E. So.	1852	2	5		20	30		50	2	10		10	10		25	0	0	50	5
97	San Antonio	San Antonio Female College*	M. E. So.	1894	2	12					187	5						25			90	17

*Statistics of 1903-4.

TABLE 34.—*Statistics of colleges for women, Division B*—Continued.

	Location.	Name.	Religious or nonsectarian control.	Year of first opening.	Professors and instructors.		Students.												College students studying—		Number in—		
					Men.	Women.	Elementary.	Secondary.	Collegiate.	Graduate.	Total number.	Graduated in 1903.	College students pursuing courses leading to— A. B degree	Ph. B degree	M. E. L. or B. L degree.	B. S. degree	Other first degree	Latin.	Greek.	Pedagogy.	Music.	Art.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1	22
	VIRGINIA.																					
98	Abingdon	Martha Washington College*	M. E. So.	1860	4	13	19	87	80	....	186	13	....	....	..	....	....	60	....	....	132	24
99	....do	Stonewall Jackson Institute	Presb.	1860	....	10	12	28	55	....	95	5	....	....	....	....	....	....	....	....	53	15
100	Bristol	Virginia Institute	Bapt.	1884	5	9	....	60	100	....	160	....	....	....	....	....	....	....	....	....	140	15
01	Charlottesville	Rawlings Institute	Bapt.	1856	4	11	20	50	100	....	170	13	4	..	21	3	....	25	..	10	120	2
102	Danville	Roanoke College of Danville	Bapt.	1860	5	17	....	20	80	5	105	8	50	.	25	.	5	50	.	25	88	15
103	Hollins	Hollins Institute	Nonsect.	1842	14	20	....	16	237	....	257	32	....	....	....	....	....	90	0	....	185	22
104	Marion	Marion Female College	Luth.	1874	2	10	....	....	100	2	102	4	30	....	....	40	....	60	....	....	60	13
105	Petersburg	Southern Female College*	Nonsect.	1863	4	12	15	20	105	....	140	4	....	....	....	....	....	....	....	....	....	....
106	Winchester	Episcopal Female Institute	P. E.	1874	4	4	15	10	60	1	86	8	1	....	....	....	....	25	0	....	54	6
	WISCONSIN.																					
107	Milwaukee	Milwaukee-Downer College	Nonsect.	1895	2	30	....	231	88	....	383	6	....	....	....	....	....	23	1	22	25	20

*Statistics of 1903–4.

TABLE 35.—*Statistics of colleges for women, Division B.*

	Name.	Annual expenses in college department.		Annual living expenses		Library.			Value of grounds and buildings	Productive funds.	Income.					Bene-factions.
		Tuition fees.	Other fees	Lowest.	Moderate.	Volumes	Value.	Value of scientific apparatus and furniture.			Tuition and other fees.	From productive funds	State or municipal appropriations	From other sources.	Total.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	ALABAMA.															
1	Anniston College for Young Ladies	$54	$10	$108	$135	2,000			$200,000							
2	Athens Female College	40	2	90	135	1,000	$1,500	$100	50,000	0	$7,500	0	0	0	$7,500	$1,500
3	Judson College	60	15		142	5,000	4,000	2,000	150,000		30,000			$46,000	76,000	2,000
4	Marion Female Seminary*	50				500		200	20,000							
5	Alabama Synodical College for Women	50			170				20,000		5,000				5,000	
6	Tuscaloosa Female College	50	20	115	140	900	1,000		25,000		10,000				10,000	
7	Alabama Conference Female College	50		100	150	5,000	5,000	1,200	100,000	$12,000	8,000	$500		14,500	23,000	0
	ARKANSAS.															
8	Central Baptist College	80		137		3,000	1,500		55,000	0	11,500	0	0	0	11,500	
	CALIFORNIA.															
9	College of Notre Dame		30	a250		7,700	12,200	15,570	240,000	0	42,000	0	0		42,000	
	GEORGIA.															
10	Lucy Cobb Institute	60		200		900	3,000		40,000	0		0	0			0
11	Cox College	54	3	150		5,000										
12	Andrew Female College	36–45		90	108	2,000	500	500	55,000	0	7,000			967	7,967	800
13	Monroe Female College	40	12		110	3,000	2,500	15,000	150,000	0	50,611				50,611	69,064
14	Brenau College	60		150	175	3,500	5,000	1,500	125,000		25,000				25,000	
15	La Grange Female College	54		150		3,400	2,000	1,500	185,000	19,137	5,100	750	0	5,150	11,000	1,400
16	Southern Female College	50	10	120	140	2,000	600	100	60,000							
17	Wesleyan Female College	80	1	140	150	3,000	1,500	2,500	300,000	32,000	67,505	1,545	0	12,400	81,510	7,500
18	Shorter College	60	0	150	150	2,700			150,000	40,000	8,600	3,000	0	24,850	36,450	0

*Statistics of 1903–4.

a Including tuition.

TABLE 35.—*Statistics of colleges for women, Division B*—Continued.

	Name.	Annual expenses in college department		Annual living expenses.		Library.		Value of scientific apparatus and furniture.	Value of grounds and buildings.	Productive funds.	Income.				Benefactions.
		Tuition fees.	Other fees.	Lowest.	Moderate.	Volumes.	Value.				Tuition and other fees.	From productive funds.	State or municipal appropriations.	From other sources.	Total.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	ILLINOIS															
19	Illinois Woman's College	$50	$5	.....	$225	1,000	$1,000	$1,000	$175,000	.....	$18,000	.....	.....	$22,000	$40,000	$18,000
20	St. Mary's School	-		a500	..	2,800	3,000	3,500	125,000	$3,500	60,000	$100	0	0	60,100	1,000
	KANSAS.															
21	College of the Sisters of Bethany	60		200	..	2,000	.....	1,500	350,000	40,000	.....	.....	.....	.....	.....	.....
	KENTUCKY.															
22	Potter College	00		200	....	5,000	5,000	500	80,000	.....	24,000	.....	.....	.....	24,000	.....
23	Caldwell College	50	5	200	200	.....	500	3,000	60,000	.....	12,000	.....	.....	.....	12,000	3,000
24	Beaumont College	60		150	175	4,000	2,000	200	30,000	0	7,000	0	0	0	7,000	0
25	Bethel Female College	50		160	160	.....	.....	50	50,000	.....	.....	.....	.....	.....	.....	.....
26	Sayre Female College	65		200	300	3,000	.....	1,000	150,000	.....	.....	.....	.....	.....	.....	5,000
27	Millersburg Female College	50		100	150	500	300	300	15,000	0	8,000	.....	.....	.....	8,000	.....
28	Jessamine Female Institute	50	5	170	180	.....	2,000	800	40,000	.....	9,000	.....	.....	1,000	10,000	.....
29	Owensboro Female College	40			120	600	600	.....	30,000	.....	.....	.....	.....	.....	.....	.....
30	Logan Female College	54		175		1,500	.....	.....	30,000	.....	8,000	.....	.....	.....	8,000	.....
	LOUISIANA.															
31	Silliman Collegiate Institute*	50	2	125	150	1,200	3,000	500	50,000	20,000	.....	.....	.....	.....	.....	.....
32	Louisiana Female College	50	0	200	275	1,500	2,500	250	30,000	0	8,606	.....	.....	591	9,196	.....
33	Mansfield Female College	50	10		125	8,000	8,000	200	60,000	.....	10,000	.....	.....	.....	10,000	.....
	MAINE.															
34	Westbrook Seminary*	45	0	135	155	3,000	2,000	1,000	160,000	70,000	4,500	1,500	$500	1,000	7,500	.....

	MARYLAND.															
35	**Notre Dame of Maryland**	100	20	200	300	10,000		6,000	800,000		40,000	0		50,000	90,000	
36	**Woman's College**	60	10		190	2,000	5,000	1,000	80,000	30,000	24,000	1,175	0		25,175	5,200
37	**Kee Mar College**			*400		1,000	1,000	500	50,000	0	15,000	0	0	0	15,000	0
38	**Maryland College for Women**	75		225		1,000			75,000							
	MASSACHUSETTS.															
39	**Lasell Seminary**	150	0		450	2,140	5,000	2,000	150,000	1,000						
40	**Simmons College**	100		225	275	5,000	3,164	18,000	786,000	1,096,000	36,213	86,549		640	123,402	
	MISSISSIPPI.															
41	**Blue Mountain Female College**	50	6	45	144	2,000	*1,800	*500	*60,000							
42	**Whitworth Female College**	50	7	75	128	1,500	2,500	500	90,000	500	4,950	50	0	18,000	23,000	1,200
43	**Industrial Institute and College**	0	10	88	100	5,000	7,500	500	400,000	156,000	17,550	9,360	81,000		108,010	500
44	**Central Mississippi Institute**	40	2	100		800	450		5,000	0	1,500			2,000	3,500	
45	**Belhaven College for Young Ladies**	60		162	162	300	265	30	23,000	0	6,070	0	0		6,070	
46	**Meridian Female College**	50	3	100	150	3,000	2,000	1,000	75,000	0						
47	**Stanton College for Young Ladies***	60	0		162	1,000	1,000	500	30,000	0	19,006				19,006	
48	**Chickasaw Female College**	36		90					10,000		2,250		0		2,250	0
49	**Port Gibson Female College**	40	8		108	300	200		30,000		2,500			3,500	6,000	1,180
	MISSOURI.															
50	**Stephens College**	50		200		1,500	1,000	800	125,000	20,000						
51	**Howard-Payne College**	55	0	205	215	14,000	2,000	1,650	60,000	12,000					20,420	
52	**Synodical Female College**	50		140	160	2,000	3,000		40,000	0	11,000	0	0	0	11,000	1,200
53	**Central Female College**	50	10	180	180	5,000	5,500	700	75,000	33,000	8,000	0	0	14,000	22,000	2,000
54	**Lexington College for Young Women**	50		160	200	1,500	1,200	800	35,000	0	15,000				15,000	
55	**Liberty Ladies College**	60	0		190	1,100	1,000		60,000	0	28,000	0	0		28,000	
56	**Hardin College***	60			200	1,000	1,000	800	90,000	70,000						
57	**Cottey College for Young Ladies**	45	10	150	150	1,000	500	700	75,000	0	25,000	0	0	0	25,000	0
58	**Lindenwood College for Women**	55			220	2,000	2,000	500	75,000	25,000	20,000	1,350			21,350	4,350
	NEW YORK.															
59	**Packer Collegiate Institute**	160 170	0			8,791	11,852	9,950	222,047	48,750	70,265	2,497	1,396	1,361	75,519	
60	**College of Saint Angela**	125	25	400	500	2,120	1,500	1,900	485,000	35,000	29,368	3,473	44	25,679	58,564	2,826
	NORTH CAROLINA.															
61	**Elizabeth College**	50	30	200	200	1,300	2,000	1,000	250,000		22,000			2,160	24,160	1,000
62	**Gaston College**	20–40	0	60	75	1,000	1,350	0	10,000	0	580		640	550	1,780	0
63	**Greensboro Female College**	70	10		130	1,500			100,000	5,000	13,000	300	0		18,300	31,000
64	**Claremont Female College**	40	3		100	2,000	1,000	100	35,000		2,000			3,000	5,000	
65	**Louisburg Female College**	25–60			90	1,500		500	20,000		7,000				7,000	
66	**Chowan Baptist Female Institute***	43	3		98	800	1,600	800	25,000	0	10,500	0	0	0	10,500	
67	**Oxford Female Seminary**	50	0	148	190	1,000		8,300	28,000	0	16,000	0	0		16,000	
68	**Baptist Female University**	53		66	108	2,500	4,000	1,500	166,000	37,000	59,420	1,500			60,920	
69	**Salem Female Academy and College**	50		200	250	6,000		2,000	200,000	20,000	40,000				40,000	3,000

*Statistics of 1903–4.

*Including tuition.

TABLE 35.—*Statistics of colleges for women, Division B*—Continued.

	State.	Annual expenses in college department.		Annual living expenses.		Library.		Value of scientific apparatus and furniture	Value of grounds and buildings	Productive funds	Income.					Benefactions.
		Tuition fees	Other fees.	Lowest.	Moderate.	Volumes	Value.				Tuition and other fees.	From productive funds.	State or municipal appropriations.	From other sources.	Total.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	OHIO.															
70	Oxford College	$50	$8	.....	$230	3,000	.....	.....	$140,000	.....	$25,396	.....	.....	.....	$25,396	.....
71	Western College	.....	.....	.....	a 300	12,407	$25,000	$25,000	250,000	$46,500	50,000	$2,000	.....	.....	52,000	$12,716
72	Lake Erie College and Seminary	100	.....	.....	200	8,000	14,000	60,000	257,500	53,000	31,800	1,897	.....	.....	33,697	63,038
	PENNSYLVANIA.															
73	Allentown College for Women	42	6	$230	.....	1,100	.....	.....	50,000	0	8,946	.....	.....	.....	8,946	0
74	Moravian Seminary and College for Women.	.....	.....	a 400	.....	5,000	.....	.....	100,000	12,000	.....	.....	.....	.....	.....	.....
75	Blairsville College	40	.....	.....	275	500	500	200	90,000	0	.....	.....	.....	.....	17,500	2,000
76	Wilson College	60	10	210	235	7,000	.....	25,000	400,000	.....	.....	.....	.....	.....	.....	.....
77	Irving College	50	0	.....	200	1,000	1,000	500	70,000	0	.....	.....	.....	.....	30,000	.....
78	Pennsylvania College for Women	125	0	.....	275	6,000	10,000	9,000	400,000	0	34,000	.....	.....	24,000	58,000	4,000
	SOUTH CAROLINA.															
79	College for Women	75	.....	.....	190	.....	.....	.....	70,000	.....	.....	.....	.....	.....	.....	.....
80	Columbia Female College	40	15	135	150	1,000	2,000	800	150,000	.....	9,000	.....	0	12,000	21,000	80,000
81	Due West Female College	38	.....	.....	112	1,000	1,000	150	10,000	.....	.....	.....	.....	.....	.....	.....
82	Greenville College for Women	40–50	0	110	125	500	.....	.....	10,000	0	.....	.....	.....	.....	.....	.....
83	Greenville Female College	45	5	120	120	1,000	1,400	50	60,000	0	21,000	0	0	0	30,000	0
84	Lander College	38	7	119	119	4,500	5,000	1,500	52,000	.....	7,950	0	0	11,400	19,350	52,300
85	Converse College	60	7	.....	190	3,200	.....	1,000	265,000	13,000	54,751	780	.....	.....	55,531	.....
86	Clifford Seminary	40	.....	80	90	1,000	2,000	200	12,000	.....	.....	.....	.....	.....	.....	.....
	TENNESSEE.															
87	Sullins College	40	10	125	.....	1,000	.....	1,500	175,000	.....	20,000	.....	.....	.....	20,000	.....
88	Tennessee Female College	50	5	100	125	800	1,000	300	15,000	.....	7,000	.....	.....	6,000	13,000	.....
89	Howard Female College	40–50	0	160	200	250	150	0	25,000	0	6,000	0	0	0	6,000	0
90	Memphis Conference Female Institute	50–60	2	175	225	6,843	3,250	2,000	50,000	0	25,000	0	0	0	25,000	0
91	Soule Female College	70	.....	.....	125	500	1,500	250	15,000	.....	.....	.....	.....	.....	.....	.....
92	Boscobel College	80	.....	.....	250	1,500	.....	100	40,000	.....	.....	.....	.....	.....	.....	.....
93	Ward Seminary	100	0	200	200	3,000	3,000	.....	100,000	0	42,500	.....	.....	30,000	72,500	0

	TEXAS.															
94	Baylor Female College	60	8	125	225	6,000	5,000	350	150,000	0	30,000				30,000	
95	Carlton College	45	5		125				30,000	0	6,624			1,000	7,624	
96	Chappell Hill Female College	50	10	135	160			500	20,000	0	6,000				6,000	
97	San Antonio Female College*	45			150	2,000	2,500	300	80,000	0	25,000				25,000	
	VIRGINIA.															
98	Martha Washington College*	40		125					40,000	10,000	24,000				24,000	
99	Stonewall Jackson Institute	50		125	150				40,000							
100	Virginia Institute	50			140	2,000	2,500	300	150,000		13,000				13,000	
101	Rawlings Institute	60	3	210	220	2,500	2,000		30,000		15,000				15,000	
102	Roanoke College of Danville	50	2	120	150	2,500	2,500	500	25,000		10,000			250	10,250	150
103	Hollins Institute	75	10		200	2,500	3,500	2,500	150,000	0						0
104	Marion Female College	30	0	110	110	1,000			30,000							
105	Southern Female College*	80				3,000		1,000	25,000		13,000				13,000	
106	Episcopal Female Institute	70			167	1,000			12,000		8,000				8,000	
	WISCONSIN.															
107	Milwaukee-Downer College	100		200	230	6,044		3,144	304,432	175,031	91,405	10,466		6,000	107,871	12,684

* Statistics of 1903–4.

* Including tuition.

TABLE 36.—*Statistics of*

	Location.	Name.	Control.	Year of first opening.
	1	2	3	4
1	Auburn, Ala	Alabama Polytechnic Institute	State	1872
2	Fort Collins, Colo	Colorado Agricultural College	State	1879
3	Golden, Colo	State School of Mines	State	1874
4	Storrs, Conn	Connecticut Agricultural College	State	1881
5	Atlanta, Ga	Georgia School of Technology	State	1888
6	Chicago, Ill	Armour Institute of Technology		1893
7	Lafayette, Ind	Purdue University	State	1874
8	Terre Haute, Ind	Rose Polytechnic Institute		1883
9	Ames, Iowa	Iowa College of Agriculture and Mechanic Arts	State	1868
10	Manhattan, Kans	Kansas State Agricultural College	State	1863
11	Annapolis, Md	United States Naval Academy	Nation	1845
12	College Park, Md	Maryland Agricultural College	State	1859
13	Amherst, Mass	Massachusetts Agricultural College	State	1867
14	Boston, Mass	Massachusetts Institute of Technology		1865
15	Worcester, Mass	Worcester Polytechnic Institute		1868
16	Agricultural College, Mich	Michigan Agricultural College	State	1857
17	Houghton, Mich	Michigan College of Mines	State	1886
18	Agricultural College, Miss	Mississippi Agricultural and Mechanical College.	State	1880
19	Westside, Miss	Alcorn Agricultural and Mechanical College	State	1871
20	Bozeman, Mont	Montana College of Agriculture and Mechanic Arts.	State	1893
21	Butte, Mont	Montana State School of Mines	State	1900
22	Durham, N. H	New Hampshire College of Agriculture and Mechanic Arts.	State	1867
23	Hoboken, N. J	Stevens Institute of Technology		1871
24	Mesilla Park, N. Mex	New Mexico College of Agriculture and Mechanic Arts.	Territory	1891
25	Socorro, N. Mex	New Mexico School of Mines *	Territory	1893
26	Potsdam, N. Y	Clarkson School of Technology		1896
27	Troy, N. Y	Rensselaer Polytechnic Institute		1824
28	West Point, N. Y	United States Military Academy	Nation	1802
29	Greensboro, N. C	Agricultural and Mechanical College for the Colored Race.	State	1894
30	West Raleigh, N. C	North Carolina College of Agriculture and Mechanic Arts.	State	1889
31	Agricultural College, N. Dak	North Dakota Agricultural College	State	1891
32	Cleveland, Ohio	Case School of Applied Science		1881
33	Stillwater, Okla	Oklahoma Agricultural and Mechanical College.	Territory	1891
34	Corvallis, Oreg	Oregon State Agricultural College	State	1870
35	Kingston, R. I	Rhode Island College of Agriculture and Mechanic Arts.	State	1890
36	Charleston, S. C	South Carolina Military Academy	State	1843
37	Clemson College, S. C	Clemson Agricultural College	State	1893
38	Brookings, S. Dak	South Dakota Agricultural College	State	1884
39	Rapid City, S. Dak	State School of Mines	State	1886
40	College Station, Tex	Agricultural and Mechanical College of Texas	State	1876
41	Logan, Utah	Agricultural College of Utah	State	1890
42	Blacksburg, Va	Virginia Agricultural and Mechanical College and Polytechnic Institute.	State	1872
43	Lexington, Va	Virginia Military Institute	State	1839
44	Pullman, Wash	State College of Washington	State	1892

* Statistics of 1903–4.

schools of technology.

Professors and instructors.						Students.										
Preparatory department.		Collegiate department.		Total number.		Preparatory.		Collegiate.		Graduate.				Total number.		
										Resident.		Nonresident.				
Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	
5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
2	0	37	0	39	0	[illegible]	0	370	14	13	0	0	0	501	14	1
11	3	32	4	39	5	160	37	133	46	2	2	0	0	410	86	2
0	0	18	0	18	0	0	0	300	0	0	0	0	0	300	0	3
0	0	20	4	20	4	0	0	101	22	0	0	0	0	101	22	4
		40	0	40	0			511	0					511	0	5
15	4	55	0	80	4	293	0	504	0	1	0	0	0	1,419	0	6
0	0	103	5	103	5	0	0	1,355	42	15	6	7	0	1 497	67	7
0	0	20	0	20	0	0	0	216	0	1	0	0	0	217	0	8
		79	26	79	26	258	33	758	126	13	0	0	0	1 774	206	9
1	4	[illegible]	15	49	19	376	124	472	254	10	16	0	0	992	470	10
0	0	115	0	115	0	0	0	823	0	0	0	0	0	823	0	11
2	0	22	0	22	0	40	0	172	0	5	0	0	0	237	0	12
0	0	28	0	28	0	0	0	179	5	7	1	0	0	220	10	13
0	0	186	2	186	2	0	0	1,500	29	32	0	0	0	1,532	29	14
0	0	37	0	37	0	0	0	317	0	8	0	[illegible]	0	325	0	15
		60	15	60	15	151	27	491	175	3	5	0	0	802	207	16
0	0	25	0	25	0	0	0	228	0	0	0	0	0	228	0	17
5	0	26	0	41	0	295	0	336	1	9	0	0	0	729	3	18
10	3	6	0	16	3	460	70	71	8	0	0	0	0	531	78	19
9	6	20	3	21	10	[illegible]	20	100	53	4	0	0	0	191	148	20
9	0	9	0	9	0	4	0	52	0	0	0	0	0	61	0	21
0	[illegible]	20	0	20	0	0	0	152	7	0	0	0	0	152	7	22
0	0	26	0	26	0	0	0	384	0	0	0	0	0	394	0	23
1	3	20	0	21	9	88	38	39	6	1	2	0	0	158	70	24
4	0	10	0	14	0	63	0	40	0	6	0	0	0	109	0	25
		7	2	9	2			53	2	0	0	0	[illegible]	84	16	26
0	0	24	0	24	0	0	0	387	0	0	0	0	0	387	0	27
0	[illegible]	82	0	82	0	0	0	447	0	0	0	0	0	447	0	28
		10	0	10	0			135	0	0	0	0	0	135	0	29
0	0	36	0	36	0	0	0	466	0	6	0	0	0	472	0	30
23	4	23	2	20	4	151	96	[illegible]	31	5	0	0	0	572	149	31
0	0	35	0	35	0	0	0	420	0	2	0	0	0	422	0	32
		25	4	25	4			125	58	0	0	0	0	409	146	33
		28	5	28	5	80	15	370	116	4	7	0	0	476	204	34
7	4	18	7	19	7	56	14	45	13	0	0	0	0	116	31	35
0	[illegible]	0	0	0	0	0	0	149	0	0	0	0	0	149	0	36
2	0	42	0	44	[illegible]	145	0	528	0	0	0	0	0	673	0	37
2	1	27	5	29	6	150	34	110	54	6	3	0	0	382	106	38
0	1	9	0	10	1	39	29	47	0	0	0	0	0	86	29	39
0	0	44	0	44	0	0	0	392	0	1	0	0	0	414	0	40
		43	15	43	15	31	6	106	37	2	0	0	0	530	186	41
0	0	57	0	57	0	0	0	668	0	21	0	2	0	731	0	42
0	0	22	0	22	0	0	0	286	0	0	0	0	0	286	0	43
12	5	36	2	48	7	256	121	216	57	4	2	0	0	610	183	44

TABLE 37.—*Statistics of schools*

	Name.	College students in—					
		Liberal arts.	Agriculture.	Mechanical engineering.	Civil engineering.	Electrical engineering.	Chemical engineering.
	1	2	3	4	5	6	7
1	Alabama Polytechnic Institute	37	25	98	35	78	36
2	Colorado Agricultural College		18	14	34	17	
3	State School of Mines (Colorado)						
4	Connecticut Agricultural College	12	82	4	4		
5	Georgia School of Technology			160	70	160	16
6	Armour Institute of Technology			122	122	216	53
7	Purdue University	106	76	378	358	429	
8	Rose Polytechnic Institute			49	63	86	14
9	Iowa College of Agriculture and Mechanic Arts	54	168	98	199	176	
10	Kansas State Agricultural College	120	162	50		151	
11	United States Naval Academy						
12	Maryland Agricultural College	61	20	66	24	0	0
13	Massachusetts Agricultural College	0	184				
14	Massachusetts Institute of Technology			158	140	98	32
15	Worcester Polytechnic Institute	2		49	35	78	23
16	Michigan Agricultural College		152	285			
17	Michigan College of Mines						
18	Mississippi Agricultural and Mechanical College		147	70	13	70	
19	Alcorn Agricultural and Mechanical College		79				
20	Montana College of Agriculture and Mechanic Arts	38	21	33	13	15	
21	Montana State School of Mines						
22	New Hampshire College of Agriculture and Mechanic Arts	9	42	8		17	9
23	Stevens Institute of Technology			384			
24	New Mexico College of Agriculture and Mechanic Arts	12	10	18			
25	New Mexico School of Mines*						
26	Clarkson School of Technology			4	9	17	
27	Rensselaer Polytechnic Institute				352	12	11
28	United States Military Academy						
29	Agricultural and Mechanical College for the Colored Race	0	45				
30	North Carolina College of Agriculture and Mechanic Arts		58	66	84	59	28
31	North Dakota Agricultural College	25	10	23			
32	Case School of Applied Science			143	72	103	46
33	Oklahoma Agricultural and Mechanical College	64	19	[a]32			
34	Oregon State Agricultural College		67	125		21	
35	Rhode Island College of Agriculture and Mechanic Arts	10	1	1	4	6	
36	South Carolina Military Academy						
37	Clemson Agricultural College		189	[a]112	50		
38	South Dakota Agricultural College	96	10	18	2	35	0
39	State School of Mines (South Dakota)						
40	Agricultural and Mechanical College of Texas		98	76	129	71	
41	Agricultural College of Utah	21	14	30			
42	Virginia Agricultural and Mechanical College and Polytechnic Institute.	54	58	157	179	206	0
43	Virginia Military Institute						
44	State College of Washington	94	21	26	38	23	0

* Statistics of 1903–4.

[a] Includes electrical engineering students.

of technology—Continued.

College students in—								Students in—						
								Pedagogy.		Business course.				
Mining engineering.	General engineering.	Textile engineering	Architecture.	Sanitary engineering.	Household economy.	Commerce.	Latin.	Men.	Women.	Men.	Women.	Military drill.	Music.	Art.
8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
17							110					477		
	15		5		5					21	19	295		
300														
					13		7	1	2	3	2	81		
		70												
			37											
												637		
			4											
34					68								15	
			11		232							320	250	
												523		
0	0	0	0	0	0	0	15	0	0	0	0	150	0	0
												163		
77			41	22								316		
					112							000		
226														
		22					10	48	0	167	0	668		
					31		4	0	0	36	■	135	56	90
62														
												121		
					5		6	2	1	15	15	126	31	0
40														
					16									
												447		
										22	0	■		
4		14	0	0	0	0	0	0	0	0	0	472	0	0
					10		5	2	11	41	6	265	72	31
86														
					37		65			14	19			
45					83	82						476	113	
												90		30
												149		
1		23										668		
0			0	0	7		25	12	9	24	9	107	53	7
47										17	14			
		9										414		
					13	18	5	0	4	102	22	268	8	178
0	0	0	0	0	0	0	31	0	0	0	0	708	0	0
												286		
21	3	0	0	0	4		4			56	13	375	106	

TABLE 38.—*Statistics of schools*

	Name.	Annual expenses in college department		Annual living expenses.		Number of fellowships.	Number of scholarships.	Library.		
		Tuition fees.	Other fees.	Lowest.	Moderate			Volumes.	Pamphlets.	Value.
	1	2	3	4	5	6	7	8	9	10
1	Alabama Polytechnic Institute	(a)	$12	$134	$150	11		19,077	2,000	$37,598
2	Colorado Agricultural College	0	3	144	180	0	0	17,639	6,500	27,798
3	State School of Mines (Colorado)	(b)	73-123	135	225			8,000	....	17,718
4	Connecticut Agricultural College	0	.	140	175	0	0	10,260	1,000	21,000
5	Georgia School of Technology	(c)	.	125	150	.	10	3 000	1,000	3 500
6	Armour Institute of Technology	$120	60	270	360	.	5	17,441	2,200	50,800
7	Purdue University	(d)	27-35	160	250	0	0	13,000	1,500	20 000
8	Rose Polytechnic Institute	100	....	125	200			11,000	3,000	22,000
9	Iowa College of Agriculture and Mechanic Arts	(e)	20	125	150			18,324	3,500	55,000
10	Kansas State Agricultural College	(f)	0	100	200			29 458	500	48,535
11	United States Naval Academy	0	0	.		0	0	46,469		100 000
12	Maryland Agricultural College	24	15	..	150	0	27	4 500	4,000	6,000
13	Massachusetts Agricultural College	(g)	....	162	190	1	3	26,503		25,973
14	Massachusetts Institute of Technology	250	0	.				47,301	19,558	140,727
15	Worcester Polytechnic Institute	160	.	200	250		70	10 000	5,000	20,000
16	Michigan Agricultural College	.	.	.	.	.	.	25 791	4,429	. .
17	Michigan College of Mines	(h)	(i)	450	500	0	2	19 883	4 500	45 267
18	Mississippi Agricultural and Mechanical College	(j)	10	75	90	5		11,551	13,427	10,697
19	Alcorn Agricultural and Mechanical College	.	..	..				2,500		3,500
20	Montana College of Agriculture and Mechanic Arts.	12	....	150	225	0	0	9 000	8 000	16,800
21	Montana State School of Mines	..	10	270	300	...		2,295	1,129	. ..
22	New Hampshire College of Agriculture and Mechanic Arts.	60	15	100	150			11,708	6,620	14,000
23	Stevens Institute of Technology	(k)	....	240	320	..	..	10 000		18,000
24	New Mexico College of Agriculture and Mechanic Arts.	5	....	150	200	2	2	12,000	8,000	15,750
25	New Mexico School of Mines	(m)	....	200	300	1	90	3,000	2,000	10,000
26	Clarkson School of Technology	100	.....	176	204	0	0	2,033	1,800	4,191
27	Rensselaer Polytechnic Institute	200	....	* 250	350	.	..	7,100	4,250	13,226
28	United States Military Academy	.	....	.		.	.	40,000	11,000	163,000
29	Agricultural and Mechanical College for the Colored Race.	8	2	48	52	0	0	1,123	. . .	1,531
30	North Carolina College of Agriculture and Mechanic Arts.	20	13	150	200	.	120	4,494	2,000	7,186
31	North Dakota Agricultural College	0	8	130	150	0	1	9 000	875	18,202
32	Case School of Applied Science	100	10-20	168	180	2	16	5,000	. .	10,000
33	Oklahoma Agricultural and Mechanical College	(n)	3-9	125	175	..	...	10,149	20,000	20,998
34	Oregon State Agricultural College	0	3	114	124	. .	...	8,000	10,000	. ..
35	Rhode Island College of Agriculture and Mechanic Arts.	(o)	1-3	204	250	...	....	12,550	5,000	16,900
36	South Carolina Military Academy	.	...	(p)	.		74	7,000	. ...	7,000
37	Clemson Agricultural College	40	13		08	.	124	11 380	6,225	16,057
38	South Dakota Agricultural College	2	2	150	185	0	0	9,000	10,850	5,500
39	State School of Mines (South Dakota)	12	..	210	300		..	1,888	4,000	2,975
40	Agricultural and Mechanical College of Texas	..	....	.	135		.	5,000	6 000	15,242
41	Agricultural College of Utah	0	5	125	175	0	0	13,500	13,000	10,962
42	Virginia Agricultural and Mechanical College and Polytechnic Institute	50	33	123	123	.	400	6,000	2,500	4,927
43	Virginia Military Institute	75	..	200	200	0	4	13,000	6,683	32,722
44	State College of Washington	(q)	....	150	175	0	36	10,200	2,800	22,500

* Statistics of 1903-4.
a Free to residents.
b Free to residents; $100 to nonresidents.
c $20 to residents; $110 to nonresidents.
d Free to residents, $25 to nonresidents.
e Free to residents; $24 to nonresidents.
f $9 to residents, $30 to nonresidents.
g Free to citizens of the United States, $120 to aliens.
h $25 to residents, $150 to nonresidents.
i $10 to residents, $25 to nonresidents.

of technology—Continued.

Value of scientific apparatus and machinery.	Value of grounds and buildings.	Productive funds.	Income.								
			Tuition and other fees.	From productive funds.	State or city appropriations.		Federal appropriations.	From other sources.	Total.	Benefactions.	
					Current expenses.	Building or other special purposes.					
11	12	13	14	15	16	17	18	19	20	21	
$61,339	$158,200	$253,500	$900	$20,280	$23,945	$1,500	$29,075	$7,339	$83,039	0	1
106,063	280,849	97,091	1,122	6,162	64,042	.....	40,000	9,722	121,048	.....	2
77,941	252,285	.....	25,000	.....	78,925	30,000	.....	8,000	141,925	$40,000	3
48,100	138,400	135,000	16	7,050	20,000	1,800	32,500	31,192	92,558	.....	4
100,000	500,000	0	20,000	.....	50,000	.....	.....	2,500	72,500	10,000	5
500,000	650,000	1,500,000	70,000	25,000	.....	.....	.....	50,000	145,000	.....	6
205,000	725,900	340,000	48,047	17,000	149,028	71,543	40,000	17,972	344,790	0	7
90,000	180,000	600,000	13,650	30,482	.....	.....	.....	2,500	46,632	500	8
305,967	993,098	683,709	28,582	35,265	110,000	241,500	40,000	5,895	461,242	.....	9
225,540	443,649	492,361	9,806	25,648	50,000	41,380	40,000	.....	166,834	.....	10
200,000	10,500,000	0	0	0	0	0	328,108	0	328,108	0	11
50,000	200,000	118,000	22,636	5,817	9,000	57,000	40,000	12,567	147,020	.....	12
141,570	291,125	361,000	3,782	14,817	43,650	3,500	31,667	.....	97,416	500	13
369,000	1,575,837	2,703,191	309,270	76,188	25,000	.....	8,333	27,265	446,056	115,303	14
100,000	500,000	700,000	.....	.....	6,000	.....	.....	.....	.....	.....	15
276,587	442,190	966,254	6,657	69,723	100,000	.....	40,000	43,485	259,865	.....	16
197,234	226,378	0	30,592	0	54,450	57,100	0	.....	142,142	.....	17
230,279	379,531	239,788	3,467	14,388	65,946	18,389	27,339	35,365	164,894	250	18
14,500	105,000	209,871	90	12,502	8,000	6,500	12,661	1,900	41,743	.....	19
81,000	145,000	23,070	2,999	0,420	17,500	6,000	40,000	4,925	80,844	.....	20
40,000	135,000	(k)	575	.....	28,750	.....	.....	.....	29,325	.....	21
49,800	227,500	150,000	1,785	8,280	10,500	.....	40,000	32,962	93,527	.....	22
65,000	488,000	806,045	59,938	39,090	.....	.....	.....	12,085	111,703	55,500	23
47,000	53,000	.....	1,291	.....	12,403	.....	40,000	2,989	56,683	200	24
2,000	80,000	0	360	.....	15,130	.....	.....	.....	15,490	.....	25
37,074	120,264	300,000	6,001	5,305	.....	.....	.....	10,177	22,173	.....	26
68,554	282,605	475,170	70,488	17,355	0	0	0	45,727	133,570	348,372	27
.....	6,000,000	.....	0	0	0	0	600,802	0	600,802	.....	28
19,000	75,000	.....	177	.....	7,500	3,750	8,250	.....	19,677	.....	29
74,800	313,040	125,000	18,760	7,500	20,000	.....	31,750	7,446	85,465	.....	30
35,040	248,757	473,114	4,307	10,846	31,398	95,400	40,000	4,696	186,647	15,000	31
150,000	500,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
79,404	129,575	.....	1,149	14,342	16,082	1,744	37,500	8,466	79,483	.....	33
27,700	191,000	193,778	1,512	10,305	.....	25,000	40,000	2,125	78,942	0	34
97,800	160,222	50,000	.....	2,500	10,000	27,500	40,000	4,000	93,000	.....	35
5,000	85,000	.....	18,307	.....	26,250	1,500	.....	.....	46,117	.....	36
204,000	437,029	154,439	3,070	9,206	118,820	.....	27,500	p 35,402	194,118	.....	37
55,000	235,000	0	5,639	11,159	31,500	0	40,000	9,275	97,570	0	38
23,000	83,000	(q)	1,848	1,203	21,000	.....	.....	.....	24,051	.....	39
109,500	550,000	200,000	2,065	14,280	60,000	70,000	33,750	.....	180,095	.....	40
70,514	289,064	160,320	5,027	7,395	31,315	12,999	40,000	10,313	107,049	.....	41
154,164	361,702	344,312	27,010	20,658	40,000	82,500	31,667	.....	201,835	.....	42
60,000	318,000	20,100	20,059	1,203	25,000	.....	.....	13,825	60,087	.....	43
95,900	280,000	27,000	3,207	5,000	55,000	12,500	20,000	16,403	132,110	400	44

j Free to residents; $30 to nonresidents.
k 100,000 acres of land.
l $150 to residents; $225 to nonresidents.
m $20 to residents, $100 to nonresidents.
n Free to residents; $15 to nonresidents.
o Including tuition.
p Includes balance from preceding year.
q 40,000 acres of land.
r Free to residents, $20 to nonresidents.

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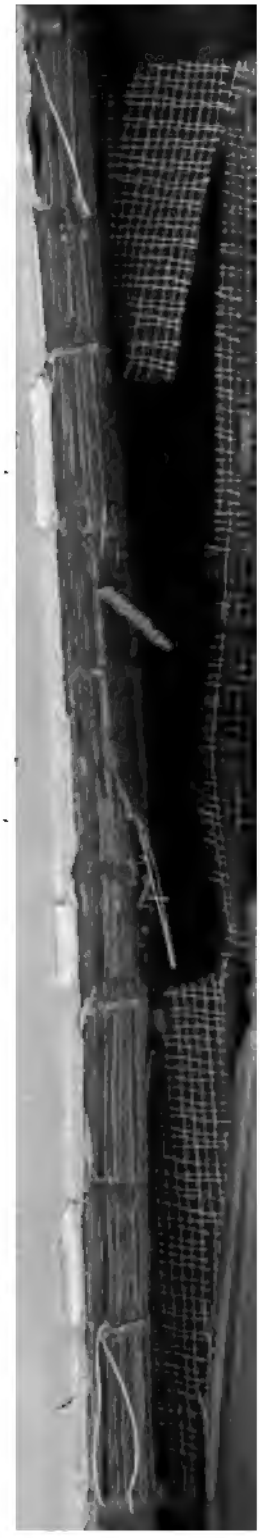

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